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ABSTRACT

This document provides an overview and summary of the findings of 14 separate studies conducted as part of a project to evaluate the impact of the nine British Columbia community colleges with respect to students, the higher education system, and the community at large. In the course of the four-year project, data were gathered on academic ability and achievement, opinions and expectations, and socioeconomic characteristics of first-year students entering postsecondary institutions in British Columbia (community colleges, universities, vocational schools, and a technical institute). Surveys were conducted of all public college faculty and the Grade 12 public school population. Past enrollments, costs, and financing at all postsecondary institutions were analyzed in order to assess the impact of the community colleges on the higher education system. Socioeconomic profiles were constructed of each community supporting a college. The Vancouver area was studied in depth, including followup studies of community college graduates and transfer students, and surveys of the views of residents and the business community toward the community colleges. Maps, tables, and charts are included throughout, and the questionnaires used in the impact study are appended. (BB)

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# The impact of community colleges

## a study of the college concept in British Columbia

John D. Dennison
Alex Tunner
Gordon Jones
Glen C. Forrester

BC RESEARCH
VANCOUVER, CANADA

JC 750 604

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*This book is dedicated to Sperrin N.F. Chant, Dean Emeritus of Arts at the University of British Columbia and the first Chairman of the Academic Board for Higher Education in British Columbia.*

*The successful development of the community college system in British Columbia is due largely to the leadership, integrity and determination of Dean Chant.*

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Chapter 1

# THE COMMUNITY COLLEGE CONCEPT

As is the case with many social institutions, it is difficult to be explicit in describing the evolution of the community college concept in Canada. Many factors, including a combination of complex social forces, a new emphasis on educational reform, a re-evaluation of national and provincial manpower needs and an increasing demand for post-secondary education, have contributed to the development of the community college idea.

Undoubtedly, the movement towards colleges in Canada has been influenced by the rapid and successful development of such institutions in the United States. During the first seventy years of the twentieth century, colleges have grown at such a rate that by 1975 all fifty states supported a type of college system. State systems display wide diversity in their organization, purposes and governance. This reflects the essence of the college as an educational structure which adapts itself to the needs, history and priorities of the community which supports it. Indeed, the college in the United States has been an essential ingredient in the plan to provide universal accessibility to post-secondary education.

In Canada, the development of the community college movement has a relatively short history. In 1960, there was only one institution which could be described as a public community college.[1] In the ensuing fifteen years, college systems have been established in five of the ten provinces. Each system has incorporated features which have given it a unique identity, while at the same time meeting certain common purposes. These "common purposes" of community colleges across Canada have been described as follows:[2]

— preparation for entry or re-entry into employment;
— preparation, after pre-professional education, for transfer to a university;
— remedial and general education for students of all ages;
— general services of a wide variety for the community;
— particular concern for the part-time student.

Of all the provincial systems, British Columbia has developed a model which is the most community oriented. In almost every respect, including finance, governance, curriculum and administrative policy, the B.C. colleges are directly responsive to their supporting communities. The impetus for the birth of the college

1. Lethbridge Community College, Lethbridge, Alberta.
2. Gordon Campbell, "Community Colleges in Canada," *C.A.U.T. Bulletin*, Volume 23, Number 3, December 1974.

system was a report prepared in 1962 by John B. Macdonald, then President of the University of British Columbia, entitled "Higher Education in British Columbia and a Plan for the Future." The Macdonald Report, as it came to be known, recommended the establishment of local two-year colleges, modelled on the California system. Colleges were to be initiated by a group of co-operating school boards, under legislation providing for referenda to ensure community support.

The first college grew out of the largest school system in the province (Vancouver) in 1965, and has remained the institution of greatest size in every respect. In 1974, almost one half of the college students in the province were enrolled in the complex organization called Vancouver Community College. Between 1965 and 1971 eight more community colleges were established, five located in rural centres[3] and three in urban areas.[4]

While it is important to note that each of the nine British Columbia colleges has some unique characteristics, there are a number of important features which are common to all. These features could be enumerated as follows:

1) an emphasis on the development and preservation of a comprehensive college curriculum. Almost every type of program usually found in community colleges is "available" in British Columbia. Recently, legislation has produced a "meld" of vocational, technical and academic transfer programs under the college umbrella;
2) an "open" admission policy designed to make college education accessible to both college-age and adult students, irrespective of their academic record;
3) maximum decentralization of college facilities to increase accessibility in a geographic sense. This factor, together with relatively modest fees, allows students to attend college at reasonable cost;
4) career, technical and vocational programs designed to meet local manpower needs and maximize employment possibilities for the graduates of these programs;
5) a faculty committed to the community college ideal and to the importance of quality teaching as a first priority;
6) a determination to serve students in every possible way, including the provision of both academic and psychological counselling, through highly developed student services.

Literature designed to interpret the community college to the population at large makes reference to most, if not all, of these features. Furthermore, considerable emphasis is placed on the "democratizing" effects of colleges in providing additional post-secondary educational opportunities.

Unfortunately, only rarely have the colleges attempted to determine the degree to which these important ideals have been attained. There have been only spasmodic efforts to evaluate college admission policies, programs, progress of col-

3. Cariboo College - Kamloops.
College of New Caledonia - Prince George.
Malaspina College - Nanaimo.
Okanagan College - Kelowna.
Selkirk College - Castlegar.

4. Douglas College - New Westminster.
Capilano College - West Vancouver.
Camosun College - Victoria.

lege students and graduates, community views, potential employer attitudes, cost benefits, faculty attitudes and a host of other issues which are essential ingredients of the community college model. Inevitably colleges have directed their energies to day-to-day problems in their first few years of operation and have given little time to an on-going evaluation program.

In response to these concerns, the authors of this report have designed and carried out a four-year program to evaluate the impact of British Columbia community colleges. This was achieved with the financial support of the Donner Canadian Foundation and several other agencies.[5]

The principal areas of college "impact" are students, both current and potential, the educational system, and the community at large. The study was, therefore, directed at these three components.

In terms of the impact on students, answers were sought to questions such as the following:

— What are the sources of college students?
— What are their socio-economic characteristics?
— What are their goals and aspirations?
— What are their views and concerns during college?
— Where do they go after college?

To assess the impact of colleges on the educational system, enrolment patterns, financial questions and the views of college faculty were studied.

The community which maintains a college was described in general physical and economic terms and by the college-related views of a sample of its citizens and business community.

Where appropriate, the foregoing questions were related to some established yardstick. For example, in the study of students, their socio-economic characteristics were compared with university, vocational school and technical institute students, and with the community at large as described by the 1971 Census of Canada.

One outgrowth of this study was the development of evaluative methods for each of the three major components described above. These could be applied to monitor future college development both in B.C. and in college systems in other provinces.

The central purpose of the entire research project was to develop practical procedures for generating relevant information to those concerned with the development of community colleges and post-secondary education generally. Presumably, it will be the colleges themselves which will be the principal beneficiaries of this work.

Certain terms have been used in this and subsequent chapters which may require explanation: these are defined in Appendix B.

---

5 B.C. Research.
Educational Research Institute of British Columbia.
University of British Columbia Alumni Fund.
Vancouver Foundation.

Chapter 2

# THE IMPACT STUDY

In 1971, a four-year program of research was begun by the authors to investigate the impact of community colleges in British Columbia. Numerous studies and surveys were conducted as part of this research project. These measured the impact of colleges on students, the educational system, and the community. A series of fourteen working reports have been published, providing detailed tabulations of the survey results. Since the research program covered so many different areas it is difficult to view the program as a whole. This chapter attempts to do that by presenting a brief overview of the *Impact Study* and by illustrating how the various segments interrelate. A short description of each of the surveys conducted during the *Impact Study* is also given.

## AN OVERVIEW

The broad objectives of the *Impact Study* were stated in the previous chapter. These were expressed in terms of three impact areas: the student, the educational system, and the community. These areas provide a convenient format for considering the research project as a whole.

### The Student

In order to assess the impact of colleges on students, it was necessary to collect factual information about them and to survey their opinions. Since the community colleges in B.C. offer a comprehensive curriculum to their students, the courses cover an extremely diverse area. However, they can be logically grouped into four basic program areas: Academic Transfer, Career/Technical, Vocational, and Other. These program areas are substantially different from each other and because of this, students from each area were surveyed. In addition, the results were used to compare college students with those attending other post-secondary institutions and high schools. Thus, these students were also surveyed.

The surveys were designed to examine what types of students were attending the various institutions. With the data collected, several "profiles" of the students were constructed. These profiles were in terms of academic achievement, opinions, and socio-economic characteristics. This latter profile utilized established

socio-economic factors such as age, sex, parents' education, occupation and income.

### The Educational System

The post-secondary educational system in British Columbia is composed basically of four types of institutions: community colleges, universities, vocational schools, and the B.C. Institute of Technology. In order to assess the impact of the colleges on this system, studies were made of enrolments and finances at these institutions. At the community colleges, faculty members were surveyed to elicit their views on some of the more important questions affecting colleges.

### The Community

In the *Impact Study*, the community was viewed from three directions: the business community, the local community, and the provincial population. Opinions from the community were sought regarding the effectiveness of the colleges in meeting local and national needs for training and education. In addition, socio-economic data were studied to construct a "profile" of these communities.

To cover these impact areas and their physical components and to construct the necessary profiles, several studies and surveys (Table 2-1) were conducted over the four-year period. These are listed below and have been cross-referenced to the impact areas in Table 2-2 and Figure 2-1. A short description of each of these is given in the latter part of this chapter.

**TABLE 2-1**
**STUDIES AND SURVEYS**

| | Title | Date |
|---|---|---|
| a | Bibliography of community college literature | 1971 |
| b | Socio-economic survey of post-secondary students | 1971 |
| c | Opinion questionnaire for community college students | 1971 |
| d | Co-operative Academic Ability Test | 1971 |
| e | Grade 12 student survey | 1972 |
| f | Post-secondary student survey | 1972 |
| g | Community survey | 1972 |
| h | College faculty survey | 1973 |
| i | Grade 12 student survey | 1973 |
| j | College-to university articulation study | 1973 |
| k | Community college alumni surveys | 1973 |
| l | Survey of the business community's views | 1974 |
| m | College to university articulation study | 1974 |
| n | Post-secondary financial study | 1975 |
| o | Post-secondary enrolment study | 1975 |
| p | Special study of Canada census data | 1975 |

Finally, another important aspect of the educational system is the student flow through this system. This has been illustrated in Figure 2-2. Students in the post-secondary institutions generally enter from the high schools and exit to the workforce. However, in the case of the community colleges a significant number enter from the workforce (the so-called "mature student") and a significant num-

Figure 2-1
AN OVERVIEW OF THE IMPACT STUDY

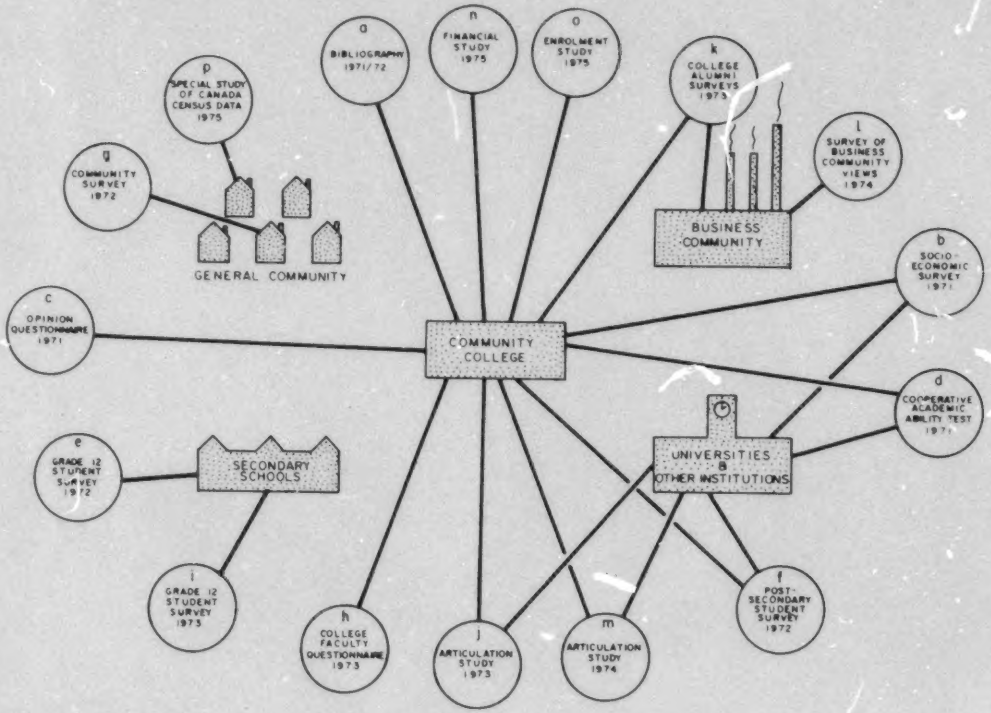
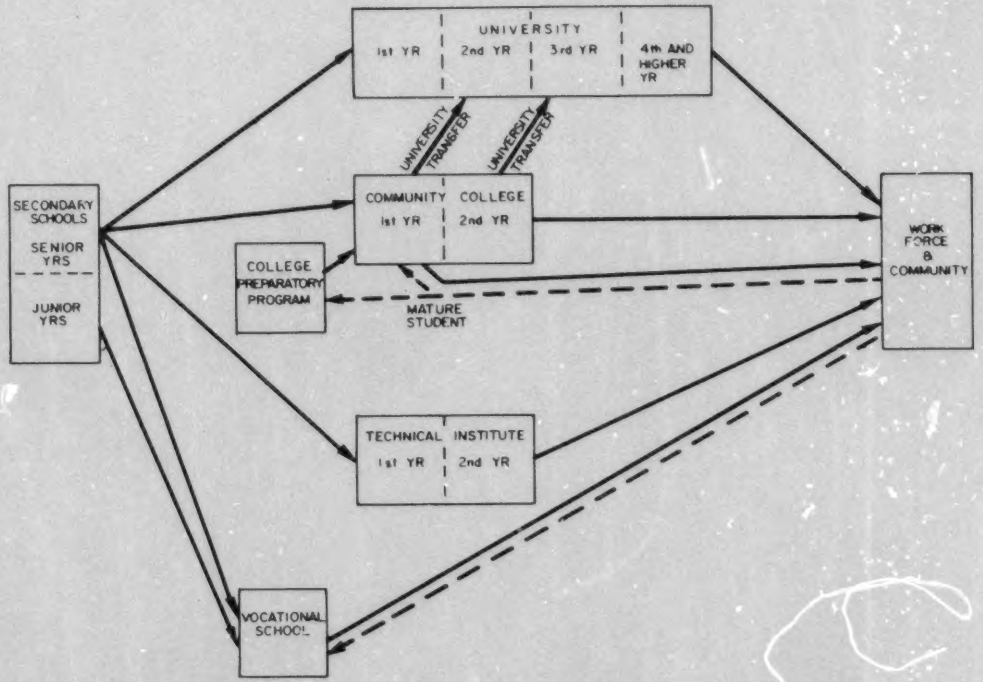


Figure 2-2

STUDENT FLOW THROUGH THE POST-SECONDARY SYSTEM IN BRITISH COLUMBIA



ber exit to the universities. Thus, the colleges have substantially altered this general flow of post-secondary students. This aspect was also investigated as part of the *Impact Study*.

TABLE 2-2
AN OVERVIEW OF THE IMPACT STUDY

| Broad Impact Areas | Physical Components | Profile Areas | Studies & Surveys[1] |
|---|---|---|---|
| 1. The Student | Secondary school | Academic Achievement | e, i |
| | Community College | Socio-Economics | b, c, d, f, j, k, m |
| | - Academic Transfer | Opinions | |
| | - Career/Technical | | |
| | - Vocational | | |
| | - Other | | |
| | University | | b, f, j, m |
| | Vocational School | | f |
| | Technical Institute | | b, c, d, f |
| 2. The Educational System | Community College | Faculty Profile | h, o, n |
| | | Faculty Opinions | |
| | | Enrolments | |
| | | Finances | |
| | University | | n, o |
| | Vocational School | | n, o |
| | Technical Institute | | n, o |
| 3. The Community | Business Community | Socio-Economics | l, p |
| | Local Community | Opinions | f, p |
| | Provincial Population | | p |

1. The letters quoted here refer to the list of studies and surveys in Table 2-1.

## THE STUDIES & SURVEYS CONDUCTED

This section gives a brief description of each of the studies and surveys conducted as part of the overall *Impact Study*. References to the appropriate chapters in this report are given together with a reference to any "Working Reports" on the same subject. A complete list of these Working Reports is given in Table 2-3.

### Bibliography (1971/72)

A comprehensive review of publications pertaining to community colleges in Canada and the United States was carried out in 1971 and updated in 1972. It covered the period from 1965-1971 and placed special emphasis on Canadian material. This bibliography was published as Working Report #1.

### Socio-Economic Survey (1971)

In the fall of 1971, students entering post-secondary educational institutions were surveyed in order to assess their socio-economic backgrounds. The questionnaire (Appendix A1) contained items relating to established socio-economic factors (parents' education, occupation, income, etc.) together with a number of asso-

ciated questions (source of educational funds, father's place of birth, etc.). First-year students in all the community colleges, universities, and the technical institute were surveyed. No data were obtained from students entering the vocational schools. In all, 11,400 students completed the questionnaire, a figure which represented 50% of the total first-year post-secondary population.[1] Tabulations of the results from this survey were published in Working Reports #2 and #5. They are discussed further in Chapters 5 and 7 of this report.

TABLE 2-3
THE IMPACT OF COMMUNITY COLLEGES: WORKING REPORTS

| Report | Title | Date of Survey | Date of Report |
|---|---|---|---|
| 1 | Bibliography | Summer 1971 | Oct. 71 |
| 1A | Bibliography (Revised) | Summer 1972 | Oct. 72 |
| 2 | Socio-Economic Survey | Fall 1971 | Feb. 72 |
| 3 | Opinion Questionnaire | Fall 1971 | Mar. 72 |
| 4 | Co-operative Academic Ability Test | Fall 1971 | Mar. 72 |
| 5 | Health Survey | Fall 1971 | July 72 |
| 6 | Survey of Grade 12 Students | Spring 1972 | July 72 |
| 7 | Post-Secondary Student Survey | Fall 1972 | May 73 |
| 8 | Survey of Grade 12 Students | Spring 1973 | July 73 |
| 9 | Community Survey (A Pilot Study) | Summer 1972 | Oct. 73 |
| 10 | Survey of College Faculty | Spring 1973 | Aug. 73 |
| 11 | Articulation Study (Performance of B.C. College Transfer Students at the University of B.C.) | Summer 1973 | Jan. 74 |
| 12 | Articulation Study (Performance of Vancouver Community College Transfer Students at the University of B.C.) | Summer 1974 | Nov. 74 |
| 13 | Articulation Study (Performance of B.C. College Transfer Students at the University of B.C.) | Spring 1975 | Mar. 75 |
| 14 | The Business Community Looks at Community Colleges | Fall 1974 | Sept. 75 |

## Opinion Questionnaire (1971)

Also in the fall of 1971, an opinion questionnaire was administered to students entering first year at the community colleges and the technical institute. Responses were obtained from 7,100 students. This represented 43% of the first-year student population at these institutions. The questionnaire was designed to obtain student views on seven major areas:

— educational expectations,
— life plans,
— objectives at college,
— knowledge of the college,
— college educational methodology,
— college involvement,
— general public issues.

1 All surveys conducted in the *Impact Study* (except where noted) attempted to obtain responses from the entire population. However, due to absentees, administrative difficulties, or spoiled questionnaires, the usable returns always represented less than 100% of the population.

A copy of the questionnaire is provided in Appendix A2. The results of the survey were published in tabular form in Working Report #3 and are discussed further in Chapter 6 of this report.

### Co-operative Academic Ability Test (1971)

Also in 1971, first-year students at the community colleges and the technical institute were asked to complete the Co-operative Academic Ability Test (C.A.A.T.). In all, 7,100 students completed the test, which represented 43% of the first year student population. The C.A.A.T. is a product of the Educational Testing Service[2] and consists of a two-part multiple-choice objective test. Each part has fifty items, the first part being verbal and the second mathematical. Working Report #4 summarized the results of these tests. Sample questions from the test and more detailed results are given in Chapter 4.

### Grade 12 Student Survey (1972 & 1973)

In the spring of 1972 and again in 1973, the entire Grade 12 public school population was surveyed. Over 19,000 questionnaires were completed in each year, representing 72% of the Grade 12 student population. The questionnaire is reproduced in Appendix A3. Tabulations of results were published in Working Reports #6 and #8 and further analysis is presented in Chapter 8.

### Post-Secondary Student Survey (1972)

Incorporating the items found to be most useful in the Socio-Economic Survey and Opinion Questionnaires used in 1971 and adding a number of other questions, the Post-Secondary Student Survey was administered in the fall of 1972 to students entering the community colleges, universities, vocational schools and the technical institute. Approximately 13,600 questionnaires were completed, which represented about 56% of the first-year post-secondary student enrolment. The questionnaire is reproduced in Appendix A4. Tabulations of results from this survey were published in Working Report #7 and the results are discussed further in Chapters 4 and 5 of this report.

### Community Survey (1972)

In 1972 a study was conducted involving the community served by British Columbia's oldest and largest college, Vancouver Community College. This four-campus complex serves a metropolitan area of 430,000 people. The purpose of the study was to elicit information and opinions concerning the community's view of the College, to identify some of the problems that might be encountered in a community survey and to set up guidelines for larger surveys that might be undertaken by others. A one percent random sample of households in the City of Vancouver was surveyed by a mail-back questionnaire (Appendix A5). A relatively low response rate was obtained. About one-third of the respondents of the mail-back questionnaire consented to be interviewed at some length by teams of two students from a sociology class at the College. Working Report #9 contained a complete description of the results and these are reviewed in Chapter 10.

---

2 Educational Testing Service - Co-operative Test Division, Berkeley 4, California.

### College Faculty Questionnaire (1973)

In 1973 a survey of college faculty was conducted at most of the public colleges in B.C. The purpose of the survey was to elicit the views of college faculty members on some of the most important and crucial questions which affect the colleges. The questions covered a broad range of issues but each one was regarded as being of singular importance in its own right. Responses were received from one-half of the 1,400 faculty members at the institutions surveyed. The results were tabulated in Working Report #10. The questionnaire is shown in Appendix A6, and the results are discussed in Chapter 11 of this report.

### Articulation Study (1973 & 1974)

In order to provide data on the academic achievement of community college transfer students after transfer to university, an articulation study was initiated in 1973. Computerized procedures for gathering and analyzing data were developed and academic records for transfer students were obtained covering the students' pre-college (high school), college, and post-college (university) experience. This study represented a longitudinal approach to the study of student achievement. The data collected provided a basis for answering a large variety of questions dealing with student performance at high school, college, and university. The study was repeated in 1974 and results from the studies were published in Working Reports #11, 12 and 13. Chapter 9 discusses these results.

### Community College Alumni Survey (1973)

Graduates from Vancouver Community College were surveyed by means of a questionnaire (Appendix A7) mailed to them four months after graduation. Its purpose was to determine what the students were doing at that time, whether the college had provided curricula relevant to their personal and employment needs and whether the college had provided the necessary personnel to make their education adequate and effective. Responses from approximately 900 graduates were obtained. The results are discussed in Chapter 9 of this report and more fully in two reports published by Vancouver Community College.[3]

### The Business Community Looks at Community Colleges (1974)

In 1974 a questionnaire (Appendix A8) was mailed in co-operation with the Vancouver Board of Trade to its 1,500 corporate members. The purpose was to survey the business community's views of community college graduates. A 20% response rate was achieved, with a fairly good representation of businesses in the Vancouver region. Results of the survey were tabulated in Working Report #14 and are discussed in Chapter 10 of this report.

### Financial Study (1975)

Early in 1975, a study was conducted of the costs and financing of post-secondary institutions in British Columbia. The various modes of financing, recent trends, and variations in costs were examined. The results of this study are reported in Chapter 12 of this report.

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3. Gordon Jones, *Alumni Study, 1973 V. V. I: Campus Graduates*, and *Alumni Study, 1973-74 Langara Campus Graduates*, Office of Institutional Planning and Development, Vancouver Community College, Vancouver, B.C., 1974 and 1975.

**Enrolment Study (1975)**

Past enrolments of post-secondary institutions in British Columbia were analyzed in 1975 and are summarized in Chapter 3 of this report.

**Special Study of 1971 Census of Canada Data (1975)**

In response to a special request made to Statistics Canada in collaboration with the B.C. Department of Education, data from the 1971 Census of Canada were obtained for British Columbia by school district. This permitted socio-economic profiles to be compiled for each of the communities supporting a college and comparisons to be made of the extent to which colleges attract a representative cross-section of their communities. The results of this study are given in Chapter 3.

Chapter 3

# COLLEGES AND COLLEGE REGIONS IN BRITISH COLUMBIA

The purpose of this chapter is to describe briefly the community colleges of British Columbia, the regions they serve, and the other post-secondary institutions of the province. In addition, recent trends in post-secondary enrolment are examined, together with the post-secondary educational participation rates of the population as a whole.

The Public Schools Act of British Columbia provides that the Board of School Trustees of a School District may independently or in collaboration with other Boards establish, maintain and operate a college. Such colleges are permitted to offer courses of instruction in the first and second year of university work, courses of other post-secondary instruction and training (including vocational training) and courses of instruction and training for adults and the community at large.

Each college is governed by a College Council composed of members appointed by participating Boards of School Trustees, by the Minister of Education and by the Lieutenant Governor in Council (provincial cabinet). The College Council is responsible for the management of college affairs, including financing; however, it is not a corporate entity and its role is that of agent of the participating Boards.

There were nine public community colleges in operation in British Columbia during the period in which most of the work of the *Impact Study* was carried out. Their names, location, year opened and enrolment are shown in Table 3-1.

The regions they encompass and the location of their campuses (six of the colleges have more than one campus) are shown, as of 1973, in Figure 3-1. These regions included 41 of the province's 74 school districts and nearly 80% of the total population of British Columbia. Almost 60% of the population resided in school districts in which a college campus was located.

With the opening of five colleges in 1974[1] and 1975[2], all of British Columbia is covered by college regions, and the vast majority of the population is within commuting distance of a college campus.

The size of each college region in terms of area and total population is shown in Table 3-2. This table also shows the age distribution of the population, the proportion of migrants, the size of the labour force and the degree of urbanization of each

1. Fraser Valley College, Abbotsford and Chilliwack.
2. Northern Lights College, Dawson Creek, Northwest College, Terrace, East Kootenay College, Cranbrook, North Island College, Campbell River.

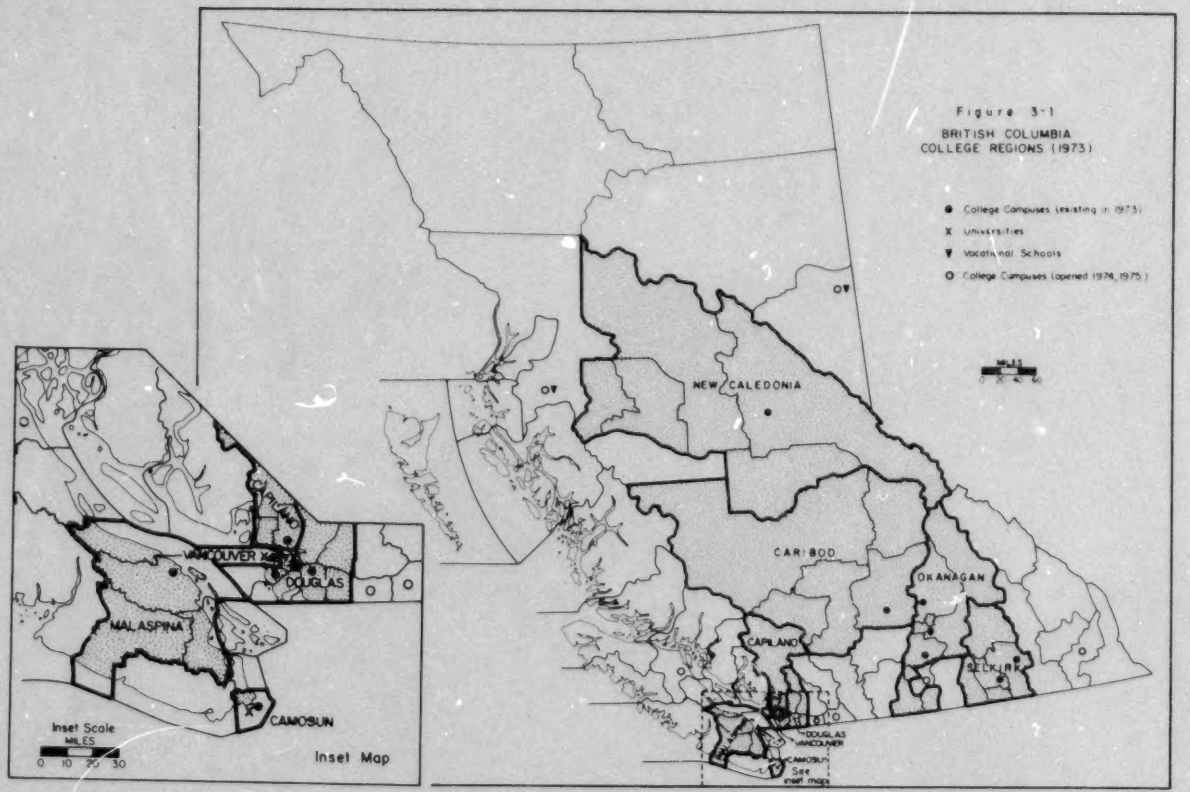
Figure 3-1
BRITISH COLUMBIA
COLLEGE REGIONS (1973)
College Campuses (existing in 1973)
Universities
Vocational Schools
College Campuses (opened 1974, 1975)
NEW CALEDONIA
CARIBOO
OKANAGAN
CAPILANO
DOUGLAS
CAMOSUN
See inset maps
NORTH ISLAND
VANCOUVER ISLAND
DOUGLAS
MALASPINA
CAMOSUN
Inset Scale
MILES
0 10 20 30
Inset Map

region. The latter has been defined as the percentage of the population residing in municipalities with a population of 5,000 or more.

The educational level of the population in each college region is shown in Table 3-3, together with the educational participation rates of the "college age" and "mature" segments of the population. Table 3-4 shows the broad occupational and income distribution of each region. These tables are included to provide some factual socio-economic data about each college region to accompany the short descriptions about them on the following pages.

TABLE 3-1
THE COMMUNITY COLLEGES OF BRITISH COLUMBIA (1973)

| Name | Commenced Operation | Participating School Boards | Enrolment 1973-74 | Location of Campuses |
|---|---|---|---|---|
| Camosun College | 1971 | 1 | 1,800 | Victoria (2 campuses) |
| Capilano College | 1968 | 3 | 1,400 | North Vancouver |
| Cariboo College | 1970 | 5 | 950 | Kamloops |
| Douglas College | 1970 | 8 | 2,000 | Surrey, New Westminster, Richmond |
| Malaspina College | 1969 | 5 | 1,700 | Nanaimo (2 campuses) |
| College of New Caledonia | 1969 | 5 | 950 | Prince George |
| Okanagan College | 1968 | 8 | 1,200 | Kelowna, Vernon, Salmon Arm, Penticton |
| Selkirk College | 1966 | 5 | 1,000 | Castlegar, Nelson (2 campuses) |
| Vancouver Community College | 1965 | 1 | 8,100 | Vancouver (4 campuses) |

1. Total enrolment in all divisions on a "full-time equivalent" basis (approximate).

## EDUCATIONAL PARTICIPATION RATES

The foregoing tables provide the basis for examining relationships which may exist between socio-economic parameters and the educational participation rate. The specific subject of the participation of secondary school graduates in post-secondary education is discussed in Chapter 8. However, as may be seen from Table 3-5, some relationships were found to exist between the educational participation rate of the population in a particular region and its socio-economic characteristics. The columns in the table are arranged such that their correlation with participation rate decreases from left to right.

The strongest correlation (column 2) was with the level of education of the population: that is, the educational participation rate was found to be highest in those areas where the educational level of the population was highest. The intention of Grade 12 students to proceed to post-secondary education was also fairly consistent with the educational participation rate of the population. The relationships with occupation, extent of urbanization and amounts of migration were increasingly ill defined and, surprisingly, weakest of all in relation to personal income.

The relationships of Table 3-5 were most apparent when parameters were *ranked* rather than expressed in terms of absolute values. That is, while there were ordinal relationships, direct correlations were less pronounced. Some reasonable relationships were found between overall educational participation rates and socio-

## TABLE 3-2
## SIZE AND POPULATION CHARACTERISTICS OF COLLEGE REGIONS

| College Region | Area (sq. miles) | Total Population (1971) | Age Distribution of Population (%) | | | | | | Proportion of Migrants[1] (%) | Population in centres of 5,000 or more (%) | Population[2] in Labour Force (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 0-4 | 5-14 | 15-24 | 25-44 | 45-64 | 65+ | | | |
| Camosun | 39 | 154,025 | 5.8 | 16.6 | 17.9 | 20.1 | 23.0 | 16.6 | 28.1 | 97.3 | 55.3 |
| Capilano | 3,679 | 137,290 | 7.5 | 20.2 | 16.9 | 27.0 | 21.3 | 7.1 | 31.1 | 96.4 | 61.9 |
| Cariboo | 40,367 | 92,881 | 9.6 | 23.7 | 18.4 | 27.2 | 16.4 | 4.8 | 43.6 | 28.1 | 61.5 |
| Douglas | 1,265 | 524,405 | 8.6 | 21.1 | 17.2 | 26.5 | 18.6 | 7.9 | 37.4 | 98.3 | 59.1 |
| Malaspina | 1,998 | 86,972 | 8.0 | 21.0 | 17.5 | 22.6 | 21.3 | 9.7 | 32.9 | 31.2 | 55.4 |
| New Caledonia | 52,105 | 108,030 | 11.6 | 25.4 | 18.5 | 28.1 | 13.2 | 3.2 | 42.7 | 36.4 | 63.2 |
| Okanagan | 13,068 | 126,605 | 7.5 | 20.7 | 16.7 | 22.1 | 21.4 | 11.7 | 42.1 | 36.4 | 55.2 |
| Selkirk | 7,994 | 61,727 | 7.7 | 20.6 | 18.2 | 22.6 | 22.2 | 8.7 | 26.8 | 33.2 | 55.4 |
| Vancouver | 54 | 430,165 | 5.8 | 13.8 | 18.3 | 25.2 | 23.5 | 13.4 | 26.7 | 99.1 | 60.3 |
| British Columbia[3] | 366,255 | 2,184,232 | 8.0 | 19.9 | 17.7 | 25.1 | 19.9 | 9.4 | 34.3 | 74.2 | 59.0 |

1. A migrant is defined as a person who moved into a municipality in the five years preceeding the 1971 Census of Canada either from within B.C., from another province, or from outside Canada.
2. Population aged 15 years and over.
3. Total province, not sum of college regions.

TABLE 3-3

EDUCATIONAL LEVEL AND EDUCATIONAL PARTICIPATION RATES OF COLLEGE REGIONS

(Percentages)

| College Region | Highest Education of Individuals Aged 25 Years and Over | | | | | | | Home Language Not English (all ages) | Individuals Attending Educational Institutions[1] | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Grade 7 or Less | Grades 8-11 | Grades 12-13 | Appren. and Vocat'l | Post-Sec. Non-Univ. | University No Degree | University Degree | | College Age (15-24) | Mature (25 & Over) | Total (15 & Over) |
| Camosun | 9.1 | 35.6 | 19.1 | 8.9 | 13.6 | 7.2 | 6.5 | 3.7 | 54.0 | 4.4 | 16.8 |
| Capilano | 4.9 | 26.0 | 20.7 | 8.5 | 17.0 | 11.0 | 12.0 | 3.4 | 61.7 | 5.9 | 19.9 |
| Cariboo | 16.5 | 41.7 | 13.3 | 7.7 | 11.5 | 5.4 | 4.0 | 5.1 | 45.9 | 3.8 | 14.3 |
| Douglas | 10.7 | 39.1 | 17.5 | 8.7 | 13.6 | 6.3 | 4.1 | 4.0 | 51.2 | 5.4 | 16.9 |
| Malaspina | 12.2 | 42.3 | 15.7 | 8.2 | 11.4 | 5.9 | 4.1 | 3.0 | 53.1 | 3.5 | 15.9 |
| New Caledonia | 16.1 | 42.5 | 13.0 | 7.7 | 11.4 | 5.8 | 3.4 | 5.8 | 42.8 | 3.3 | 13.2 |
| Okanagan | 16.3 | 42.7 | 12.7 | 7.3 | 11.5 | 5.4 | 4.0 | 5.3 | 55.0 | 2.5 | 15.6 |
| Selkirk | 21.0 | 37.4 | 11.8 | 8.5 | 10.9 | 5.6 | 4.7 | 9.7 | 57.9 | 3.2 | 16.9 |
| Vancouver | 15.4 | 32.3 | 16.8 | 7.5 | 12.3 | 7.6 | 8.1 | 13.2 | 50.9 | 5.7 | 17.0 |
| British Columbia[2] | 13.2 | 37.6 | 16.1 | 8.3 | 12.6 | 6.7 | 5.6 | 6.4 | 51.2 | 4.5 | 16.2 |

1. 1971 Census of Canada: full-time and part-time attendance.
2. Total province, not sum of college regions.

## TABLE 3-4
## OCCUPATIONAL AND INCOME CHARACTERISTICS OF COLLEGE REGIONS
(Percentages)

| College Region | Occupation[1] | | | | | Individual Income[2] (1971) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Professional | Managerial | Technical and Sales[3] | Trades and Clerical[4] | Resources Industries[5] | Less than $2,000 | $2,000 to $5,999 | $6,000 to $9,999 | $10,000 to $14,999 | $15,000 and Over |
| Camosun | 16.2 | 3.9 | 19.6 | 57.5 | 2.9 | 44.3 | 28.4 | 18.3 | 6.5 | 2.6 |
| Capilano | 18.1 | 9.1 | 24.3 | 45.7 | 2.8 | 44.2 | 20.7 | 16.7 | 10.9 | 7.5 |
| Cariboo | 12.4 | 2.6 | 22.5 | 53.5 | 8.9 | 48.4 | 22.5 | 19.2 | 7.7 | 2.1 |
| Douglas | 12.3 | 4.1 | 24.1 | 55.8 | 3.8 | 46.4 | 22.8 | 20.2 | 8.1 | 2.5 |
| Malaspina | 11.5 | 2.6 | 22.8 | 53.1 | 10.1 | 50.5 | 21.3 | 19.3 | 6.9 | 2.0 |
| New Caledonia | 10.2 | 3.2 | 23.1 | 54.2 | 9.3 | 46.5 | 21.5 | 20.9 | 8.9 | 2.3 |
| Okanagan | 11.2 | 2.9 | 21.9 | 53.4 | 10.5 | 51.7 | 25.3 | 15.6 | 5.4 | 2.0 |
| Selkirk | 14.1 | 2.7 | 20.0 | 56.4 | 6.8 | 50.6 | 21.1 | 20.6 | 6.3 | 1.4 |
| Vancouver | 15.0 | 4.4 | 20.1 | 58.5 | 2.0 | 42.5 | 29.9 | 18.5 | 6.0 | 3.2 |
| British Columbia[6] | 13.1 | 4.0 | 21.7 | 55.2 | 6.0 | 46.4 | 24.5 | 18.9 | 7.4 | 2.8 |

1. Labour force 159.0% of population aged 15 and over).
2. Population aged 15 and over.
3. Technical, sales, transportation, communication.
4. Skilled and semi-skilled work, farmer, clerical, service.
5. Mining, logging, fishing, farm work, unskilled work.
6. Total province, not sum of college regions.

TABLE 3-5

RELATIVE RANKING OF EDUCATIONAL PARTICIPATION RATES AND SOCIO-ECONOMIC PARAMETERS

| College Region | Educational Participation of Population (1) | Educational Level of Population (2) | Educational Intentions Beyond Grade 12 (3) | Occupational Status (High) (4) | Occupational Status (Low) (5) | Extent of Urbanization (6) | Amount of Migration (7) | Personal Income (8) |
|---|---|---|---|---|---|---|---|---|
| Capilano | 1 | 1 | 1 | 1 | 2 | 1 | 4 | 1 |
| Vancouver | 2 | 2 | 2 | 3 | 1 | 1 | 1 | 5 |
| Selkirk | 3 | 4 | 3 | 4 | 5 | 7 | 1 | 8 |
| Douglas | 3 | 4 | 7 | 5 | 4 | 1 | 6 | 3 |
| Camosun | 3 | 3 | 4 | 2 | 2 | 1 | 3 | 5 |
| Malaspina | 6 | 6 | 6 | 7 | 8 | 7 | 5 | 7 |
| Okanagan | 7 | 7 | 5 | 7 | 9 | 5 | 7 | 9 |
| Cariboo | 8 | 8 | 9 | 6 | 6 | 9 | 9 | 4 |
| New Caledonia | 9 | 9 | 8 | 9 | 7 | 5 | 7 | 2 |

1. Population aged 15 years and over participating in education full-time or part-time.
2. Population having partial or complete university training.
3. Grade 12 students expressing a firm intention to proceed directly to post-secondary education.
4. Population in professional or managerial occupations.
5. Population in unskilled and resource-extraction occupations: ranked in order of *smallest* proportion of population in this category.
6. Population residing in centres of 5,000 or more.
7. Individuals moving into their current municipality during previous five years.
8. Personal income (1971) of $10,000 and above.

economic parameters, but no clear-cut and consistent relationships were found respecting the college-age and mature segments of the population.

Taken as a group, the areas of the province which have colleges have a higher educational participation rate than the areas which don't have colleges: the rates for college-age students were found to be 52.2% and 47.3% respectively, and for mature students 4.8% and 3.0%. On a total population basis these figures are 16.7% and 14.1%.

The socio-economic level of the areas without colleges was, on the whole, lower. For example, in regions with colleges an average of 13.7% of the population were classified as professional, 4.3% managerial and 4.5% unskilled. Comparable figures for regions without colleges were 10.6%, 2.7% and 12.1% respectively, and this variable was seen to be the most important one in explaining participation rates. In college regions, 13.0% of the population had at least *some* university education, compared to 9.3% in regions without colleges.

Consequently, the higher educational participation is, at least to some extent, related to socio-economic factors rather than to the presence of a college. It may be argued that the impetus for the establishment of a college in the first place, is directly related to the socio-economic characteristics of its population. However, when comparing areas with similar educational levels, it was found that the educational participation rates in areas with colleges was higher than in those without. Specifically, when examining areas where the proportion of the over 25 year age group of the population with partial or complete university education was between 9% and 10%, it was found that the educational participation rate in areas with colleges was 9.8% compared to 9.3% for areas without. Though this is but a crude indication, it nevertheless provides some measure of the extent to which a college can increase the educational participation of the population.

It must be remembered that this comparison almost certainly understates this impact of community colleges. At the time of the 1971 Census of Canada, on which the foregoing observations were based, many of the colleges were still relatively new institutions, and the large increase in part-time enrolments which has occurred in recent years was only beginning.

## THE COLLEGES AND THEIR REGIONS

### Camosun College

Camosun College is located in Victoria and serves a metropolitan area with a population of 154,000. Victoria is the seat of the provincial government, and the principal sources of income of its residents are the civil service and tourism. In addition, the city has some forest products and light industries.

The College was opened in 1971. Following melding with the Victoria Vocational School, it has two campuses: one for academic and career/technical programs, the other for vocational programs. About one-third of the enrolment is vocational, and the remainder is fairly evenly split between academic, career/technical and college preparatory students.

### Capilano College

Capilano College is located in North Vancouver and serves a region with a

population of 137,000 which includes the school districts of Howe Sound, West Vancouver, and North Vancouver. The latter two are, to a large degree, well-to-do residential suburbs of Vancouver. Principal sources of income in the urban parts of the region are light industries and service industries and in the more rural areas forest products industries and some mining.

The College was opened in 1968 and now centres its operations at one campus. It offers academic and career/technical but not vocational or college preparatory programs. Academic programs account for nearly 60% of the enrolment.

**Cariboo College**

Cariboo College is located at Kamloops in south-central British Columbia, and comprises the school districts of Kamloops, North-Thompson, Cariboo-Chilcotin, Lillooet and South Cariboo. The population of the region is 93,000, and principal sources of income include cattle ranching, forest industries, mining and tourism.

The College opened in 1971 and is located on a single campus. A little over one-third of the enrolment is academic, with the remainder fairly evenly split between career/technical and vocational.

**Douglas College**

Douglas College has three campuses located immediately east and south of Vancouver in Surrey, New Westminster and Richmond. Its region has a population of 525,000 and includes the school districts of Langley, Surrey, Delta, Richmond, New Westminster, Burnaby, Maple Ridge and Coquitlam. Sources of income in the area include dairy and mixed farming and a wide variety of light and heavy industry.

The College opened in 1970. Nearly 60% of its students are enrolled in academic programs, with the remainder in career/technical.

**Malaspina College**

Malaspina College is located in Nanaimo on the east coast of Vancouver Island. It serves an area with a population of 87,000 and includes the school districts of Cowichan, Cowichan Lake, Ladysmith, Nanaimo and Qualicum. Principal sources of income are forest and forest products industries, fishing and cement manufacture.

The College opened in 1969 and is located on two campuses, one being the former Nanaimo Vocational School. Close to half the enrolment is vocational, one-quarter is academic and one-quarter career/technical.

**College of New Caledonia**

The College of New Caledonia is located in Prince George in central British Columbia. Its region comprises the school districts of Quesnel, Smithers, Burns Lake, Nechako and Prince George, which have a population totalling 108,000. Principal sources of income are forest and forest product industries, mining, farming and cattle raising.

The College opened in 1969 and has a single campus centred around the former Prince George Vocational School. Vocational programs account for about 40% of the enrolment, academic programs for about one-third and career/technical programs for about one-quarter.

### Okanagan College

Okanagan College has four campuses located at Kelowna, Vernon, Penticton and Salmon Arm. Its principal campus is Kelowna, centred around the former Kelowna Vocational School. Its region comprises the school districts of South Okanagan, Keremeos, Revelstoke, Armstrong-Spallumcheen, Vernon, Central Okanagan, Summerland and Shuswap. They have a combined population of 127,000. Principal sources of income in the region are agriculture, tourism, trade and services, with some mining and forest products industries.

The College opened in 1968. Academic and vocational programs each account for about 40% of the enrolment, the remaining 20% being career/technical.

### Selkirk College

Selkirk College has three campuses. The principal campus, offering academic and career/technical programs, is located in Castlegar. There are two campuses in Nelson, one being the former Nelson Vocational School, the other the former Kootenay School of Art. The population of the college region is 62,000 and principal sources of income are mining, smelting, forest and forest products industries, agriculture and tourism. The region comprises the school districts of Nelson, Castlegar, Arrow Lakes, Trail and Grand Forks.

The College opened in 1966. Vocational programs account for about 40% of the enrolment, with the remainder fairly evenly divided between academic and career/technical programs.

### Vancouver Community College

Vancouver Community College opened in 1965 and has four campuses. It serves the city of Vancouver which, with a population of 430,000, is the commercial and financial centre of British Columbia. Important sources of income include business, financial and trade activities, port and shipping operations, heavy and light industry, manufacturing and service industries.

The Langara Campus offers academic and career/technical programs and accounts for nearly half the total enrolment of the College; 70% of the students enrolled there are in academic programs and the remainder in career/technical. The Special Programs Division (King Edward Centre) offers primarily pre-college, basic skills, and English language training, and accounts for nearly one-quarter of the total enrolment of the College. The Vocational Institute division accounts for nearly 20% of the total enrolment and the School of Art for 5%. The remaining enrolment (about 10% on a full-time equivalent basis) is accounted for by the Community Education Division which offers a variety of part-time courses in a great many different locations.

## THE OTHER POST-SECONDARY INSTITUTIONS

Two private colleges were also included in the *Impact Study* surveys. These were Trinity Western College in Langley and Columbia College in Vancouver, with a full-time equivalent enrolment of about 350 each. Trinity Western College is operated by the Evangelical Free Church, and offers a largely academic program.

Columbia College offers college preparatory and academic programs.

In addition to the vocational divisions of the community colleges, there are vocational schools in Burnaby, Terrace and Dawson Creek. The former is a large institution with an F.T.E. enrolment of 1,500. The latter two are located in remote parts of the province, and have enrolments of about 200 each. They were included in the Post-Secondary Survey of 1972, and form the nuclei of two of the community colleges opened in 1975.

The British Columbia Institute of Technology was included in all of the *Impact Study* surveys. It is a large institution with some 3,000 full-time and 5,000 part-time (night school) students. It was opened in 1964 and offers a wide range of technology programs.

British Columbia has four universities, three public and one private. All were included in the surveys of the *Impact Study*.

The University of British Columbia (U.B.C.), was founded in 1915 and is the largest university in the province, with an enrolment of about 20,000. It offers almost all of the professional degrees, and degrees in arts, science and education.

The University of Victoria, originally a college of U.B.C., became autonomous in 1963. It has an enrolment of about 5,000 and offers degrees in arts, science and education.

Simon Fraser University was opened in 1965 and operates on a system of three semesters per year. It has an enrolment of about 7,000 and offers degrees in arts, science and education.

Notre Dame University, a small private institution with an enrolment of about 500, is expected to be re-organized in 1976 into a provincially operated institution, offering both college and university-level programs.

## RECENT ENROLMENT TRENDS IN POST-SECONDARY EDUCATION

The growth of enrolments in post-secondary education in recent years is shown in Table 3-6 and Figure 3-2. While total full-time enrolments rose from about 42,000 in 1968 to 54,000 in 1974, an increase of nearly 30%, part-time enrolments almost tripled from 10,000 to 28,000.

The most dramatic growth has been that of the community colleges whose full-time enrolment increased three-fold (and part-time enrolment five-fold) between 1968 and 1974. In fact, the colleges accounted for three-quarters of the growth of full-time post-secondary enrolments and nearly half that of part-time enrolments.

The 30% growth in full-time post-secondary enrolments from 1968 to 1974 could be accounted for by a similar increase in senior secondary school enrolments over the same period. Thus, the growth in part-time enrolments can be regarded as being equivalent to the net increase in post-secondary participation in British Columbia.

Although their part-time enrolments increased, the full-time enrolments of universities and the technical institute have remained fairly constant. Since the overall participation rate of secondary school graduates in post-secondary education has been relatively stable, it is clear that the colleges largely absorbed the increase in post-secondary enrolments resulting from the increased number of sec-

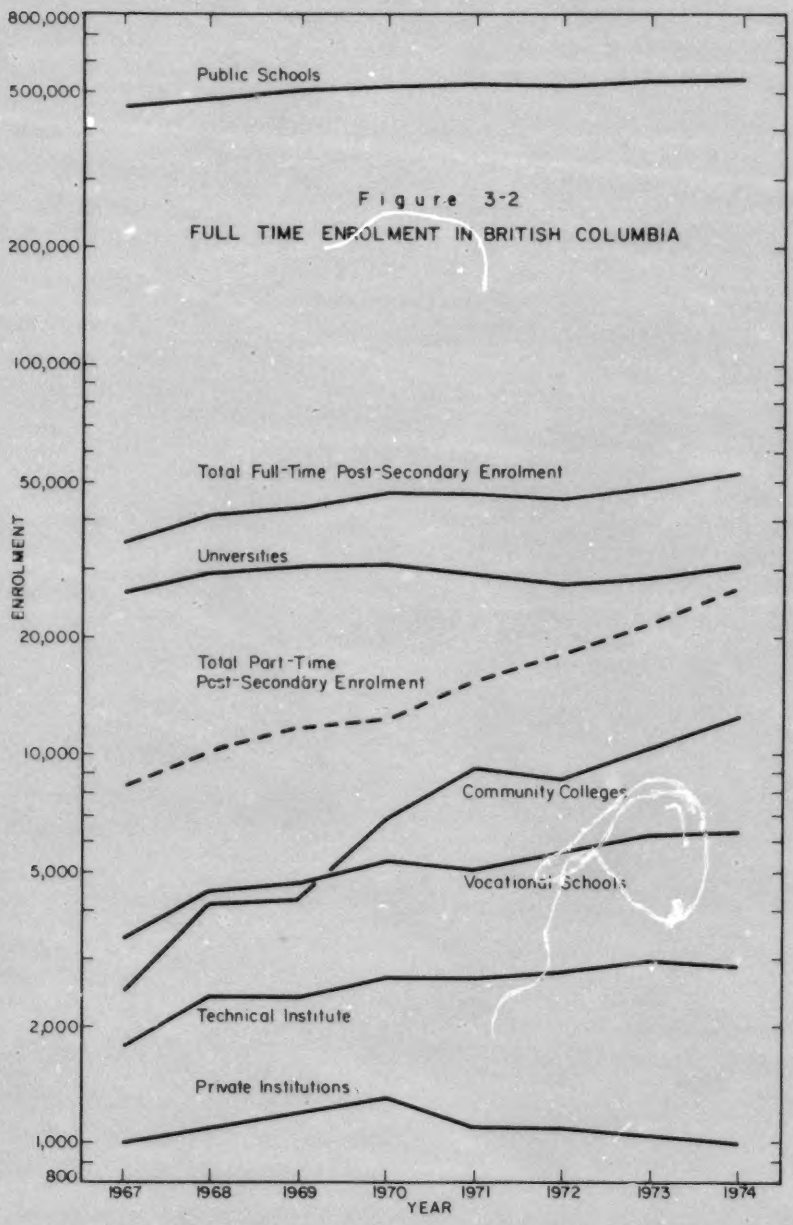


Figure 3-2

FULL TIME ENROLMENT IN BRITISH COLUMBIA

ondary school graduates.

A large majority of full-time students enter post-secondary education directly or within a year of leaving secondary school. This was found to be the case for 70% of full-time (5 or more courses) college students (85% of university students, 54% of technology students and 25% of vocational students). On the other hand, only 51% of college students taking 3 or 4 courses and only 26% of those taking 1 or 2 courses were within a year of leaving secondary school. In the latter two groups, the average time since leaving secondary school was 6 years. Consequently, it is reasonable to conclude that most part-time students would not have pursued post-secondary education in the past, when the opportunities for part-time education were extremely limited.

**TABLE 3-6**
**ENROLMENTS IN POST-SECONDARY EDUCATION IN BRITISH COLUMBIA**

| Post-Secondary Sector | 1967-68 | 1968-69 | 1969-70 | 1970-71 | 1971-72 | 1972-73 | 1973-74 | 1974-75 |
|---|---|---|---|---|---|---|---|---|
| | | | | *Full-Time* | | | | |
| Community Colleges[1] | 2,500 | 4,200 | 4,300 | 7,000 | 9,400 | 8,800 | 10,700 | 12,800 |
| Universities | 26,700 | 28,600 | 30,700 | 31,000 | 29,200 | 27,700 | 28,700 | 30,500 |
| Technical Institute | 1,800 | 2,400 | 2,400 | 2,700 | 2,700 | 2,800 | 3,000 | 2,900 |
| Vocational Schools[2] | 3,400 | 4,500 | 4,700 | 5,400 | 5,100 | 5,700 | 6,300 | 6,400 |
| Private Institutions | 1,000 | 1,100 | 1,200 | 1,300 | 1,100 | 1,100 | 1,000 | 1,000 |
| Total Full-Time | 35,400 | 41,800 | 43,300 | 47,400 | 47,800 | 46,100 | 49,700 | 53,600 |
| | | | | *Part-Time* | | | | |
| Community Colleges[1] | 1,600 | 1,900 | 2,700 | 4,400 | 5,800 | 6,200 | 7,000 | 9,400 |
| Universities | 3,500 | 4,500 | 4,700 | 3,200 | 4,200 | 4,700 | 6,000 | 8,300 |
| Technical Institute | 1,200 | 1,800 | 2,000 | 2,300 | 2,900 | 3,600 | 4,600 | 5,400 |
| Vocational Schools[2] | 2,100 | 2,100 | 2,500 | 2,700 | 3,000 | 3,900 | 4,500 | 4,500 |
| Total Part-Time | 8,400 | 10,300 | 11,900 | 12,600 | 15,900 | 18,400 | 22,100 | 27,600 |

1. Excluding vocational divisions of community colleges, but including Art School and Special Programs Divisions of Vancouver Community College.
2. Including vocational divisions of community colleges.

## SUMMARY

This chapter has presented a brief description of the community colleges in British Columbia and the regions they serve, and illustrated their remarkable growth over the past ten years.

It was found that the educational participation rates in the various college regions are related to the socio-economic characteristics of those areas, most particularly to the educational level of the population. However, it was also observed that the participation rates in areas of similar socio-economic level are somewhat higher in those that have a college campus than in those which do not.



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Chapter 4

# THE COLLEGE STUDENT — AN ACADEMIC PROFILE

This chapter is concerned with an examination of the academic background of college students. It includes both assessments of their potential, as measured by an academic ability test, and their achievement, as determined from their formal academic records. Additional measures of achievement which were examined include the last grade of high school completed and the elapsed period since that time. The records of college students were compared with those of students at university, technical institute and vocational schools.

Particular emphasis is given to an examination of the heterogeneity of college students in terms of their academic background. This degree of heterogeneity is compared to the background of other post-secondary students.

It has been generally assumed that community colleges in British Columbia attract students with a wide range of academic ability and previous academic achievement. Two major factors have contributed to this assumption. In the first place, the colleges offer a "comprehensive" curriculum with programs available for university transfer students, technical and career students, vocational and trade training, and for a wide range of remedial and adult education requirements. Presumably, students will tend to seek courses and programs appropriate to their ability and their previous level of academic achievement. Consequently, one of the major responsibilities of counsellors at the colleges is to help students to choose programs which best fit their abilities.

Secondly, the colleges attempt to maintain an "open door" policy which allows for considerable flexibility in the admission of students, particularly adults, whose previous academic record is incomplete, or unimpressive. It is important to note that an open door policy does not imply that all courses in the college are open to all students who seek entry. The policy does, however, mean that the college must strive to provide a wide range of courses and programs at a variety of academic levels to allow students to choose levels commensurate with their ability and previous preparation.

In view of these features of community colleges, a wide range of ability and achievement among college students could be anticipated. The studies reported in this chapter show that this is so. The real impact of the open door policy has been upon that considerable segment of the population which has not been able to attend college in the past. Such potential students are often referred to as "disadvantaged." This term can be interpreted in a number of ways depending on context. In

this chapter it implies disadvantaged in the academic sense; it refers to those people in the community whose previous academic record has been unsatisfactory, or whose academic achievement has not been sufficient to guarantee their progression up the academic ladder — a ladder which has led, in the past, primarily to a university degree.

A further complication in discussing disadvantaged students arises because the extent to which academic ability is reflected in high school achievement has not been clearly established. Some educators have suggested that "grade getting" is largely a learned skill which is not fully dependent upon intellectual ability. In fact, it has been suggested that many students have been unable to complete secondary school successfully because of conflicts with the "system." Be this as it may, it seemed important to determine whether community colleges attract students whose previous record of achievement would, under ordinary circumstances, prevent their progression to university or a technical institute.

In the early years of college development in British Columbia, the limited data available suggested that the colleges were attracting a high percentage of students who could not progress to university. These students were enrolling in the academic-transfer programs, a fact which suggested that their initial intention was to continue to university. It might be suggested that at that time the colleges had not developed reputations which might be termed "academically respectable." Consequently, high achievers in high school were not enrolling in the colleges in substantial numbers. Data presented in this chapter indicate that this pattern has changed as colleges have become more established.

A study, conducted in September 1970, showed 1100 full-time students enrolled in the academic transfer program at Vancouver Community College. Of these students, 49% had a high school record sufficient to admit them to university. (In British Columbia, admission to university requires 60% or better in Grade 12 subjects on an academic program.) About 17% had graduated from high school in non-academic programs, 11% had a graduating percentage of less than sixty, 4% had previously failed or withdrawn from university, 8% were from out-of-province or had attended non-Canadian high schools, and 11% had no records available. The majority in the last category were adult students, whose academic records had been lost.

## THE CO-OPERATIVE ACADEMIC ABILITY TEST

In an effort to obtain an objective measure of the academic ability of students entering community colleges in the fall of 1971, the Co-operative Academic Ability Test (C.A.A.T.) was administered to as many students as possible. A total of 7,100 students completed the test.

The C.A.A.T., a product of the Educational Testing Service, consists of a two-part, multiple-choice, objective test of fifty items in each part. Twenty minutes are permitted for each section.

The vocabulary section consists of items of the familiar verbal analogy type, an example of which is presented below:

Example: Select the lettered pair of words which are related to each other most nearly in the same way as the original pair.

| | *tinkle* | : | *bells* |
|---|---|---|---|
| A | whistle | : | tunes |
| B | glide | : | snakes |
| C | rustle | : | leaves |
| D | wrinkle | : | fabrics |

The mathematical section of the test, however, involves a new testing format. To quote the E.T.S. handbook[1] on the C.A.A.T.:

"The [C.A.A.T.'s] item type was deemed especially useful for this kind of test, because it seems to place a minimum of emphasis on reading, to require more resourcefulness and insight than straight computation problems, and to allow presentation of more items per unit of testing time (and thus produce more reliable results per unit of testing time) than most of the usual mathematical item types."

Example: Each problem consists of two quantities, one placed in Column A and one in Column B. Compare the two quantities marking:

A — if the quantity in A is greater;
B — if the quantity in B is greater;
C — if the two quantities are equal;
D — if the size relationship cannot be determined from the information given.

| **Column A** | **Column B** |
|---|---|
| ⅞ x ⅞ | ⅞ x ⅞ |
| Weight of ⅔ pound | Weight of 10 ounces |
| Area of Δ PQR, with angles of 30°, 40° and 110° | Area of Δ STU, with angles of 30°, 40° and 110° |

The C.A.A.T. does not presume to measure native intelligence. It measures skills in handling specific kinds of verbal and mathematical material. These skills are learned and improvable.

Some comment needs to be made regarding the validity of the test for British Columbia college students. Before a decision was made to use the C.A.A.T., it was circulated among a large number of individuals familiar with the high school and college curricula in British Columbia. In no case did any judge question the content or validity of either the verbal or the mathematical sections of the test for B.C. students.

The presentation of the test presented a number of difficulties. Each college made arrangements to suit its own particular situation. In consequence, the percentage of students completing the test varied considerably among institutions.

The results of the test are summarized in Table 4-1. They show a great range in academic ability, both within each institution and between the various institutions. For comparative purposes, data for students entering the technical institute and the various faculties at the University of British Columbia have been included. The

1 Educational Testing Service — Co-operative Test Division, Berkeley 4, California

U.B.C. data were obtained in previous years as part of the admission procedures, and exhibited great consistency from year-to-year.

TABLE 4-1
CO-OPERATIVE ACADEMIC ABILITY TEST RESULTS
(Scores)

| Students | Vocabulary Test | | Numerical Test | | Total Score | |
|---|---|---|---|---|---|---|
| | Mean | Std. Dev. | Mean | Std. Dev. | Mean | Std. Dev. |
| COLLEGE | | | | | | |
| Academic Transfer | 28.8 | 8.3 | 30.5 | 8.2 | 59.3 | 14.3 |
| Career/Technical | 27.1 | 8.0 | 29.2 | 8.1 | 56.2 | 13.9 |
| Vocational[1] | 27.0 | 7.6 | 28.2 | 7.3 | 55.2 | 12.7 |
| Other | 25.0 | 8.9 | 25.8 | 8.6 | 50.8 | 15.0 |
| TECHNICAL INSTITUTE | 30.4 | 8.4 | 35.0 | 7.9 | 65.4 | 14.5 |
| UNIVERSITY OF B.C. | | | | | | |
| Arts Faculty | 34.0 | 7.7 | 35.2 | 7.3 | 67.8 | 12.6 |
| Science Faculty | 33.2 | 7.5 | 41.0 | 5.5 | 73.9 | 10.8 |

1. Vancouver Community College, Vocational Institute campus.

Probably the most intriguing aspect of the results is the standard deviation obtained in each instance. This statistic is indicative of the "spread" of the scores around the mean. It may be noted that in almost all cases the standard deviations of college students' scores were greater than those from the university faculties. This phenomenon indicates that although mean scores of college students were lower than those from university faculties, there was considerable overlap between the two. In other words, it may be said that in terms of academic ability, university faculties tend to attract a relatively homogeneous student population, while colleges draw a considerably more heterogeneous group of students. This statistic is consistent with the situation found for other variables, such as age and socio-economic background.

Figure 4-1 shows the cumulative distribution of C.A.A.T. scores obtained by various groups of post-secondary students, and provides a ready means of determining the overlap between them.

## THE POST-SECONDARY STUDENT SURVEY, 1972

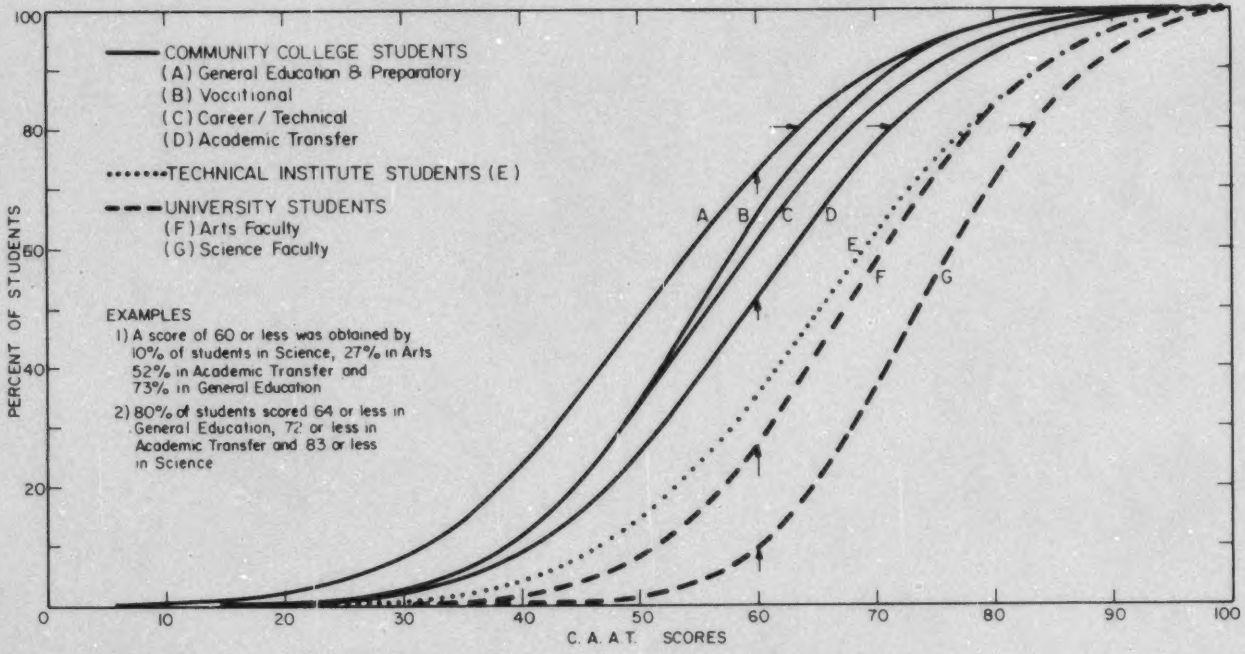
In the fall of 1972, a survey was conducted of all students entering the first year at community colleges, private colleges, universities, vocational schools and the technical institute in British Columbia. Data were gathered concerning students' academic and socio-economic backgrounds, their educational experiences and their opinions, expectations and aspirations. In all, 6,500 college, 3,400 university, 3,400 technical institute and 300 other students responded to the questionnaire — a total of 13,600. This represented 56% of all first-year post-secondary students.

In analyzing the data, particular attention was paid to items which might be indicative of a student's academic background. These items were concerned with the secondary school achievement of students and the time elapsed since leaving secondary school.

Figure 4-1

CUMULATIVE DISTRIBUTION OF ACADEMIC ABILITY TEST SCORES

(Percent of students obtaining a given score or less)



## High School Average

One question asked students to identify their secondary school average (A, B, C+, C, P or F). The results were summarized by college program and are shown in Table 4-2. For comparative purposes, the data obtained from university students are also included, together with data from grade 12 students obtained in a separate study (Chapter 8).

TABLE 4-2
HIGH SCHOOL ACADEMIC AVERAGES OBTAINED BY POST-SECONDARY STUDENTS IN BRITISH COLUMBIA
(Percentages)

| Students | Distribution of Grades | | | | | | |
|---|---|---|---|---|---|---|---|
| | A | B | C+ | C | P | F | Total |
| COLLEGE | | | | | | | |
| Academic Transfer | 4 | 23 | 39 | 29 | 5 | 0 | 100 |
| Career/Technical | 3 | 18 | 44 | 31 | 4 | 0 | 100 |
| Vocational | 2 | 14 | 47 | 33 | 4 | 0 | 100 |
| Other | 4 | 17 | 32 | 36 | 10 | 1 | 100 |
| TECHNICAL INSTITUTE | 5 | 29 | 45 | 19 | 2 | 0 | 100 |
| UNIVERSITY | 14 | 42 | 32 | 11 | 1 | 0 | 100 |
| GRADE 12 | 4 | 22 | 37 | 30 | 6 | 1 | 100 |

It is clear that students entering university have generally higher grade averages than college students. However, a considerable percentage of the latter, particularly in the academic transfer programs, had secondary school averages in the A and B categories. A certain degree of conjecture might arise from this. For a number of possible reasons — lower fees, opportunity to stay at home, expectation of reasonably small classes, anticipation of high quality instruction — a significant number of high achievers chose the college route in preference to university. A further reason could be the opportunity to take a part-time job while enrolled in a college. Given the traditional academic timetables of the university, it is extremely difficult to continue both work and study while enrolled.

Another observation which might be made about the data in Table 4-2 is the wide range in grade averages reported by college students. Whereas over half of university students have A or B averages and virtually all university students are C+ or better, the averages gained by college students are much more widely distributed. Only about 20% of college students have A or B averages and one-third have C or P averages. This supports the view that college students are extremely heterogeneous in academic background. College students are a much more representative group of secondary school graduates than are university students. It appears from the data in Table 4-2 that technical institute students, although less homogeneous than university students in terms of secondary school achievement, are certainly more so than college students.

## Last Grade Completed in Secondary School

Another measure of the academic background of college students is the last grade successfully completed in secondary school. Responses to this question are



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summarized in Table 4-3. While most college students entering academic transfer and career/technical programs tended to have Grade 12 completion or secondary school graduation, a reasonably large percentage of college students had left school earlier. This again emphasizes the heterogeneous background of college students. By comparison, university students had almost invariably completed secondary school.

College students entering vocational programs tended to have left secondary school at somewhat lower grade levels than the other students. This fact is related to the entrance requirements of vocational programs, for many of which the completion of Grade 10 is the basic prerequisite.

TABLE 4-3
LAST GRADE COMPLETED IN SECONDARY SCHOOL
(Percentages)

| Students | Gr. 7 | Gr. 8 | Gr. 9 | Gr. 10 | Gr. 11 | Gr. 12 | Gr. 13[1] | Total |
|---|---|---|---|---|---|---|---|---|
| COLLEGE | | | | | | | | |
| Academic Transfer | 0 | 1 | 1 | 3 | 12 | 75 | 8 | 100 |
| Career/Technical | 1 | 0 | 1 | 4 | 9 | 80 | 5 | 100 |
| Vocational | 1 | 5 | 9 | 20 | 12 | 49 | 4 | 100 |
| Other | 1 | 1 | 5 | 17 | 32 | 38 | 6 | 100 |
| TECHNICAL INSTITUTE | 0 | 0 | 0 | 1 | 3 | 87 | 9 | 100 |
| VOCATIONAL SCHOOL | 3 | 7 | 8 | 24 | 14 | 37 | 7 | 100 |
| UNIVERSITY | 1 | 0 | 0 | 0 | 1 | 94 | 4 | 100 |

1. Grade 13 or senior matriculation, which gave credit for first year university, was abolished in British Columbia around 1965.

The data presented in Table 4-3 again display the wide range in the academic backgrounds of college students. No doubt the open door admission policy of the community college contributes to this phenomenon. College students entering vocational programs, as is the case with vocational school students, show an extremely diverse range in educational backgrounds. This is particularly evident when vocational school students are compared with students entering academic transfer and career/technical programs at colleges. By comparison, university and technical institute students have a highly homogeneous academic background. Clearly, university students follow a pattern which reflects the admission policies of their institution.

## Time Since Leaving Secondary School

A further factor which has a bearing on the academic background of college students is the length of time since leaving formal education. As is evident from Table 4-4, the colleges tend to attract a much older group of students than the universities, and many who have been away from formal education for years. This is more so in the case of vocational and career/technical college students than for academic transfer students.

University students tend to enter university directly from secondary school. Over 80% of first-year university students were one year or less away from secondary school; the equivalent figure for the colleges was closer to 55%. On the other hand, whereas only 2% of university students were ten or more years away from school, over 15% of college students fell into this category.

TABLE 4-4
TIME ELAPSED SINCE LEAVING SECONDARY SCHOOL
(Percentages)

| Students | Less than one Year | One Year | Two Years | Three Years | Four Years | Five to Nine Years | Ten or More Years | Total |
|---|---|---|---|---|---|---|---|---|
| COLLEGE | | | | | | | | |
| Academic Transfer | 50 | 11 | 7 | 5 | 3 | 10 | 14 | 100 |
| Career/Technical | 44 | 16 | 9 | 6 | 5 | 10 | 10 | 100 |
| Vocational | 22 | 10 | 9 | 11 | 7 | 17 | 24 | 100 |
| Other | 36 | 13 | 10 | 8 | 5 | 14 | 14 | 100 |
| TECHNICAL INSTITUTE | 33 | 20 | 15 | 10 | 6 | 11 | 5 | 100 |
| VOCATIONAL SCHOOL | 15 | 10 | 13 | 10 | 7 | 18 | 27 | 100 |
| UNIVERSITY | 75 | 9 | 6 | 3 | 1 | 4 | 2 | 100 |

Again, the open door admission policies of the colleges seem to be reflected in the data presented in Table 4-4. Although mature students are not required to submit a record of their secondary school grades when applying for admission, they are eligible to enrol in the same programs as college-age students. Many mature students, reflecting high levels of motivation, take advantage of their new opportunity and perform creditably at college. It is obvious that in many of these cases the period which has elapsed since formal education has not impeded their academic success.

## SUMMARY

This chapter has examined several aspects of the academic background of students entering community colleges. The data presented have included academic potential as measured by an academic ability test, and achievement in terms of secondary school averages and grades completed. Comparisons were made with university, technical institute and vocational school students.

Community colleges have attempted to attract a broader student population in terms of academic achievement than that which has enrolled in the traditional institutions of post-secondary education. Various administrative policies adopted by the colleges have attempted to meet this goal. These include an open door admission policy and a broad, comprehensive program of studies.

The data presented indicate that this goal has, to a large extent, been achieved. College students show a wide background of academic achievement in each of the variables examined.

By comparison, university students and technical institute students show a high degree of homogeneity in academic background. This reflects the selective processes which precede admission to these institutions. On the other hand, the colleges have attempted to provide an alternative route to higher education for students whose academic history would have limited such an opportunity in the past. In this they have been successful.

Chapter 5

# THE COLLEGE STUDENT — A SOCIO-ECONOMIC PROFILE

In recent Canadian literature on the community college,[1,2] considerable reference is made to the goals and purposes of the college. Great emphasis is placed on "the extension of educational opportunity" as a component of community college philosophy. This concept, commonly referred to as "the democratization of post-secondary education," was featured prominently in the United States during the 'fifties and 'sixties, and has been adopted in Canada.

Irrespective of the location of a college, there is a consistent view of its purposes and of the "college concept." This view appears in articles, studies and calendars of community colleges and may be summarized in two principal theses which form the basis for administrative policies.

1) Colleges are democratizing agents in the sense that they are providing educational opportunities to those students who for social, cultural, financial, academic or geographic reasons were prevented from continuing their education in the past.
2) Colleges are offering "second chance" opportunities for students who are generally older, sometimes long-removed from formal education, and often "in conflict" with the traditional-education system.

To illustrate how college administrative policies have supported these ideals and to help ensure their realization, the following practices apply in the majority of community colleges:

— student admission requirements are liberal;
— tuition fees range from none to amounts which are considerably below those charged by universities;
— highly developed counselling services attempt to meet the needs of every student;
— college timetables are designed to allow for flexible attendance patterns, such as part-time and evening courses.

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1. Gordon Campbell, *Community Colleges in Canada*, Ryerson Press, Toronto, 1971.
2. Association of Canadian Community Colleges, *Clientele and Community*, ACCC, Toronto, 1974.

Despite these ideals there has been, to date, little evidence to suggest that students entering community colleges really are a "new breed" in post-secondary education. While university students are regarded as being representative of an "elite" segment of the population, college students are assumed to be representative of a broad cross-section of society. While there are a number of ways of examining these assumptions, very few well-designed studies have attempted the task. This chapter summarizes the results of a number of projects which were conducted to examine the socio-economic characteristics of college students.

## SOCIO-ECONOMIC STUDIES

Several variables are commonly used to construct socio-economic profiles. These include parents' occupation, parents' education, siblings' education and family income.

In designing a survey instrument to gather data related to these variables, careful attention was paid to the categories used in the Canadian Census. A major census is conducted every ten years, the last being in 1971, and a mini-census is conducted every five years. Many hypotheses concerning socio-economic variables can only be tested by means of comparative census data.

For survey and census data to be comparable, it was necessary to conduct the study of post-secondary students as close as possible to the time of the Canadian Census. Even so, the long delay in obtaining complete census data makes comparison a lengthy process.

In the *Impact Study*, two separate projects for gathering socio-economic data were carried out. The first was in September 1971 (the same year as the Canadian Census) and consisted of a questionnaire to students entering post-secondary institutions. It contained items relating to the established socio-economic variables (parents' education and occupation, family income, etc.), together with a number of associated questions (source of educational funds, father's place of birth, etc.). In all, 11,400 students completed the questionnaire, a figure which represented 50% of the total first-year post-secondary population. All universities, colleges and the technical institute responded, but in this first survey students entering vocational schools were not included.

Following analysis of the data from this survey and discussion with college faculty and other interested personnel, a second questionnaire was designed for presentation in 1972. It incorporated the most useful items from the first instrument with the addition of other questions which were deemed to be of particular interest.

The second questionnaire was completed by 13,600 students in September 1972. This figure represented 56% of the provincial post-secondary student population. Responses came from all colleges, public and private, three universities, two vocational schools and the technical institute. Rates of response at different institutions ranged from 30% to 90%. The results were analyzed and reported for the academic transfer, career/technical and vocational segments of the college student population.

As the results of the two questionnaires were comparable, and as the second received a higher response rate, most of the results reported in this chapter are

taken from the Post-Secondary Student Survey (1972). The major purposes of both studies may be expressed as follows:

1) *to compare community college students, in socio-economic terms, with students who enter other areas of post-secondary education such as universities, private colleges, vocational schools and technical institutes.* To reach this objective, data from such institutions were also collected. This was essential for an assessment of the impact of the community colleges in "democratizing" educational opportunity;
2) *to develop a descriptive profile of the community college student.* One facet of such a profile is a description of the student's socio-economic background. Community colleges have portrayed themselves as being "community oriented" and, as such, should provide educational opportunities for a broad representation of the community. To what extent has this been achieved?
3) *to examine the kind of student, in socio-economic terms, who enrols in the various programs available in colleges.* Do students in academic transfer programs differ from those enrolling in technical or vocational programs? The answers contribute to an understanding both of the behaviour of students from particular backgrounds, and of the appeal of college programs.

## PARENTS' EDUCATION

Students were asked to identify the highest level of education reached by their parents. Response options ranged from elementary school (up to Grade 8) to a graduate degree from university. Students in the four principal areas of post-secondary education differed significantly in terms of their father's education as categorized by three major levels (elementary school, Bachelor's degree, graduate degree). These results are summarized in Table 5-1.

TABLE 5-1
EDUCATION OF THE FATHERS OF POST-SECONDARY STUDENTS
(Percentages)

| Students | Highest Level of Education of Fathers | | | | | | |
|---|---|---|---|---|---|---|---|
| | Less than Gr. 8 | Sec. School 1-2 yrs. | Sec. School 3-5 yrs. | Tech., Trade, Some Univ. | Bachelor's Degree | Graduate Degree | Total |
| College | 16 | 18 | 25 | 24 | 8 | 9 | 100 |
| University | 11 | 15 | 23 | 23 | 14 | 14 | 100 |
| Technical Institute | 15 | 21 | 26 | 24 | 9 | 5 | 100 |
| Vocational School | 38 | 21 | 16 | 17 | 4 | 4 | 100 |
| Population[1] of B.C. | 21 | 33 | 22 | 19 | 4 | 1 | 100 |

1. Based on 1971 Census, male population, 35-64 yrs.

The results clearly indicate that the educational level reached by the fathers of university students is higher than that of college students. The same is true for

their mothers. It was also found that a higher percentage of the fathers of academic transfer students had university degrees than did the fathers of students in career/technical and vocational programs. Using data from the 1971 Census of Canada, a comparison was made of the educational level of the parents of college and university students and that of the population of the province as a whole.

Considerable differences exist in the levels of fathers' education at different colleges. In particular, Capilano College, which is located in an upper-income area of the Lower Mainland, displayed a pattern of fathers' education which is closer to that at the universities than at other colleges. This is an indication that community characteristics are reflected in the college population. Given the situation in British Columbia, where the local component of college financing places an emphasis on "in district" students, a majority are from the local college community.

A study of Grade 12 students in British Columbia (Chapter 8) showed that a relationship exists between fathers' education and post-secondary plans. Students whose fathers had considerable formal education tended to have higher educational goals than students whose fathers had little formal education. Apparently, the same relationship exists for college students. The results summarized in Table 5-2 show that the fathers of students in academic transfer programs have higher levels of education than the fathers of students in vocational and career/technical programs. Clearly the influence of fathers and mothers is reflected in the educational goals of their children. Thus, there are fundamental socio-economic differences among students in the various programs available at college.

TABLE 5-2
EDUCATION OF THE FATHERS OF COLLEGE STUDENTS ACCORDING TO PROGRAM SPECIALTY
(Percentages)

| Students | Highest Level of Education of Fathers | | | | | | |
|---|---|---|---|---|---|---|---|
| | Less than Gr. 8 | Sec. School 1-2 yrs. | Sec. School 3-5 yrs | Tech., Trade, Some Univ. | Bachelor's Degree | Graduate Degree | Total |
| Academic Transfer | 15 | 17 | 25 | 24 | 9 | 10 | 100 |
| Career/Technical | 18 | 19 | 27 | 22 | 7 | 7 | 100 |
| Vocational | 24 | 21 | 23 | 26 | 3 | 3 | 100 |
| Other | 17 | 17 | 26 | 23 | 9 | 8 | 100 |

## FAMILY FINANCES

In the 1972 questionnaire, students were asked to indicate their approximate annual family income according to the five income categories centred around the "average" 1971 family income for British Columbia (approximately $10,000 per year). The results, shown in Table 5-3, are grouped into three categories: under $5,000, under $10,000, and $10,000 or more.

The income of the families of university students was found to be higher than that of college students. Trinity Western and Capilano were two exceptions to this

generalization: Trinity Western is a private residential liberal arts college, attracting many students from the United States, and Capilano is located in an upper-income area.

The data in Table 5-3 illustrate the differences in family income among the various colleges. These reflect the socio-economic characteristics of the areas in which the colleges are located. The heterogeneity among the colleges with respect to family income is consistent with the heterogeneity found to exist with other socio-economic variables.

**TABLE 5-3**
**ANNUAL FAMILY INCOME REPORTED BY POST-SECONDARY STUDENTS, BY INSTITUTION**
**(Percentages)**

| Institution | Income Category | | |
|---|---|---|---|
| | Under $5,000 | Under $10,000[1] | $10,000 and Over |
| COLLEGES | | | |
| Camosun | 19 | 56 | 44 |
| Capilano | 7 | 23 | 77 |
| Cariboo | 15 | 49 | 51 |
| Columbia | 13 | 47 | 53 |
| Douglas | 13 | 45 | 55 |
| Malaspina | 16 | 53 | 47 |
| New Caledonia | 20 | 56 | 44 |
| Okanagan | 19 | 62 | 38 |
| Selkirk | 9 | 53 | 47 |
| Trinity | 9 | 40 | 60 |
| Vancouver (Langara Campus) | 14 | 49 | 51 |
| TECHNICAL INSTITUTE | 13 | 53 | 47 |
| UNIVERSITIES | | | |
| U.B.C. | 9 | 39 | 61 |
| Simon Fraser | 10 | 42 | 58 |
| Victoria | 8 | 44 | 56 |
| Notre Dame | 18 | 50 | 50 |

1. Incorporates the "Under $5,000" category

Table 5-4 shows the family income of college students according to their program of study. In addition, the family income distribution of all college, university and technical institute students is compared with census data for the whole province.

The figures in Table 5-4 indicate that post-secondary students generally are a non-representative sample of the population at large, as measured by family income. There is little difference between academic transfer college students and university students in this regard. On the other hand, career/technical college students and vocational school students are very much below their colleagues in family income, although they are still somewhat higher than the population at large.

The socio-economic selectivity which was found among post-secondary students in categories such as parents' education and occupation is also reflected with

TABLE 5-4

ANNUAL FAMILY INCOME OF POST-SECONDARY STUDENTS COMPARED TO THE POPULATION AT LARGE

(Percentages)

| Population Grouping | Income Category | | |
|---|---|---|---|
| | Under $5,000 | Under $10,000[1] | $10,000 and Over |
| COLLEGE STUDENTS | | | |
| Academic Transfer | 12 | 44 | 56 |
| Career/Technical | 15 | 54 | 46 |
| Vocational[2] | 15 | 51 | 49 |
| All College Students | 14 | 49 | 51 |
| UNIVERSITY STUDENTS | 9 | 41 | 59 |
| TECHNICAL INSTITUTE STUDENTS | 13 | 53 | 47 |
| POPULATION OF B.C.[3] | 20 | 57 | 43 |

1. Incorporates the "Under $5,000" category.
2. Vancouver Community College, Vocational Institute Campus.
3. From the 1971 Census of Canada.

regard to family income. However, differences here are less pronounced. Undoubtedly, this is due to the steep increases in earning power, particularly of the lower socio-economic groups, which have occurred during the past decade. Inequities in income between different groups of the population are more quickly corrected than is the case with occupational and educational differences.

The differences in family income between college students and the population at large were also examined on a regional basis. At the time of this study, colleges in British Columbia were financially supported by co-operating school districts to a maximum level of 40%. Consequently, a high percentage of college students are "in district." This allows for a comparison to be made between the family incomes of college students and that of the regional population, and hence a determination of the extent to which college students are, in this respect, representative of their local communities.

Four college regions in the province were selected for this analysis. Vancouver, Camosun (Victoria), Capilano (a Lower Mainland region), and Selkirk (a rural

TABLE 5-5

A COMPARISON OF THE ANNUAL FAMILY INCOMES OF COLLEGE STUDENTS AND OF THE COMMUNITY AT LARGE IN FOUR COLLEGE REGIONS

(Percentages)

| Region | Students[1] | | | Community[2] | | |
|---|---|---|---|---|---|---|
| | Under $5,000 | Under $10,000 | $10,000 and Over | Under $5,000 | Under $10,000 | $10,000 and Over |
| Camosun | 19 | 56 | 44 | 20 | 58 | 42 |
| Vancouver | 14 | 49 | 51 | 22 | 57 | 43 |
| Capilano | 7 | 23 | 77 | 11 | 38 | 62 |
| Selkirk | 9 | 53 | 47 | 21 | 64 | 36 |
| B.C. Total | 14 | 49 | 51 | 20 | 57 | 43 |

1. 1971 and 1972 Survey of Post-Secondary Students.
2. 1971 Census of Canada.

region) provided the diversity which is both necessary and interesting. The results of this analysis are summarized in Table 5-5. In each case, college students were a selected sample of the community. The selectivity is particularly obvious in the "upper-income" group ($10,000 and over per year).

## PARENTS' OCCUPATION

Occupational status has traditionally been regarded as a significant factor in classifying socio-economic level. For the purposes of the *Impact Study*, occupations were grouped in fifteen separate categories, including "retired," "deceased," and "other."

Among the fifteen categories, particular attention was paid to "managerial" and "professional." These are traditional indicators of high socio-economic status and thus are quoted most frequently in the literature. Results show that a significantly higher percentage of university students had fathers in these occupations than did college students. On the other hand, a lower proportion of vocational school students indicated that their fathers' occupations were in the "professional" and "managerial" categories than did college and university students. Considerable variation was found to exist between individual colleges in many of the occupational categories, consistent with occupational differences among college regions.

Table 5-6 shows some of the differences existing among the occupations of the fathers of college, university, vocational school and technical institute students.

TABLE 5-6
OCCUPATIONS OF THE FATHERS OF POST-SECONDARY STUDENTS
(Percentages)

| Students | Professional | Managerial | Sales, Technical, Transport | Clerical, Trade, Service | Miner, Logger, Unskilled | Other | Total |
|---|---|---|---|---|---|---|---|
| COLLEGE | | | | | | | |
| Academic Transfer | 14 | 27 | 13 | 29 | 7 | 10 | 100 |
| Career/Technical | 11 | 24 | 12 | 32 | 10 | 11 | 100 |
| Vocational | 5 | 20 | 8 | 42 | 14 | 11 | 100 |
| Other | 11 | 23 | 12 | 30 | 9 | 15 | 100 |
| College Total | 13 | 25 | 12 | 31 | 8 | 11 | 100 |
| UNIVERSITY | 21 | 28 | 12 | 25 | 6 | 8 | 100 |
| TECHNICAL INSTITUTE | 10 | 26 | 11 | 36 | 9 | 8 | 100 |
| VOCATIONAL SCHOOL | 5 | 9 | 8 | 47 | 17 | 14 | 100 |

Comparing college students on the basis of their college programs, differences were found to exist among academic transfer, career/technical and vocational students. A higher proportion of academic transfer students classified their fathers in the "managerial" and "professional" categories than did other college students. The influence of fathers is, therefore, generally reflected in the programs chosen by post-secondary students. Children of parents who have "higher level" occupations select programs which lead to degrees and, eventually, to higher level occupa-

tions for themselves. This observation is consistent with that of the apparent influence of father's education on program choice. It is also consistent with data found among Grade 12 students which are reported in Chapter 8.

Relationships involving the occupations of mothers showed patterns comparable to those reported by fathers; however, conclusions are complicated by the fact that almost two-thirds of mothers were reported as "housewife."

It was intended to relate the data concerning the occupations of the fathers of post-secondary students to similar data from the population at large, as obtained from the 1971 census. The occupational categories in the Socio-Economic Survey were based on those of the 1961 census, in anticipation of a similar format for 1971. However, the occupational categories in the 1971 census were defined differently, and direct comparison with data reported in this chapter was impossible. Of particular concern was the re-definition of the "managerial" category: in 1961, 12% of the working population was classified as "managerial" in B.C., compared to only 4% in 1971.

The managerial and professional proportions indicated by post-secondary students were compared in Table 5-7 with those of the 1961 census.

**TABLE 5-7**
**SELECTED OCCUPATIONS OF THE 1961 B.C. POPULATION, AND OF THE FATHERS OF POST-SECONDARY STUDENTS**
**(Percentages)**

| Population Grouping | Occupational Categories | |
|---|---|---|
| | Professional | Managerial |
| College | 13 | 25 |
| University | 21 | 28 |
| Technical Institute | 10 | 26 |
| Vocational School | 5 | 9 |
| Population of B.C. | 3 | 12 |

The figures indicate that college students are a selective segment of the population in terms of fathers' occupations, although by no means as highly selective as are university students. A significant difference was found in these two occupational groups between vocational school students and all others, including the population at large. These data are consistent with the differences observed with respect to other socio-economic variables.

Further analysis (Chapter 8) based upon these two occupational groups will show that Grade 12 students are also a selective sample of the population at large. Thus, the selection process begins even before the potential post-secondary student graduates from secondary school.

## TIME OF DECISION TO CONTINUE EDUCATION BEYOND SECONDARY SCHOOL

The S.C.O.P.E. study,[3] conducted by the Center for Research in Higher Education, Berkeley, analyzed data from several thousand high school students in a num-

3 S.C.O.P.E. Study, *School to College: Opportunities for Post-Secondary Education*. Center for the Study of Higher Education, University of California, Berkeley, California, 1969.

ber of areas in the United States. One of its conclusions was that the time of decision to continue education beyond secondary school had an important effect upon eventual behaviour. In other words, the earlier the decision, the more likely the student would continue. This is not to suggest that the student made the decision independently, but rather that it was made by him and his family. The typical response of many university students was "I've been planning to go to university for as long as I can remember."

An interesting question in this context is whether community college students would show the same pattern of early decision, or whether the accessibility of community colleges would allow them to make later commitments to continue their education.

One item in the questionnaire asked students to identify the school level at which they decided to continue to post-secondary education. University students were found to make the earliest decisions, while a considerable number of college students had, in fact, made the decision after leaving school. It is interesting that these results, which are summarized in Table 5-8, are comparable with the U.S. experience.

**TABLE 5-8**
**TIME OF DECISION TO CONTINUE EDUCATION BEYOND SECONDARY SCHOOL**
**(Percentages)**

| Students | Grade 7 or Earlier | Grades 8-11 | Grade 12 | After Leaving School | Still Undecided | Cannot Remember | Total |
|---|---|---|---|---|---|---|---|
| University | 36 | 32 | 10 | 9 | 1 | 12 | 100 |
| Community College | 22 | 23 | 13 | 27 | 2 | 13 | 100 |
| Technical Institute | 23 | 34 | 14 | 19 | 1 | 9 | 100 |
| Vocational School | 6 | 21 | 8 | 53 | 1 | 11 | 100 |
| All Students | 23 | 25 | 12 | 25 | 3 | 12 | 100 |

College students whose fathers' occupations could be classed as "professional" tended to make the decision earlier than other students; almost one-third indicated that they made the decision in "Grade 7 or earlier." This proportion was significantly higher than for students whose fathers had other occupations. It appears that whatever influence parents had upon this decision, the occupation of the father seemed to play an important part.

The responses of community college students to this question differed according to the programs they were taking in college. Academic transfer students tended to make their decision much earlier than either the career/technical or vocational program students. In the latter case, a pattern consistent with that of students in vocational schools was evident, with half of vocational program students making the decision after leaving high school.

The results of the question as applied to college students are summarized in Table 5-9.

TABLE 5-9
TIME OF DECISION OF COLLEGE STUDENTS TO CONTINUE EDUCATION BEYOND SECONDARY SCHOOL
(Percentages)

| College Program | Grade 7 or Earlier | Grades 8-11 | Grade 12 | After Leaving School | Still Undecided | Cannot Remember | Total |
|---|---|---|---|---|---|---|---|
| Academic Transfer | 26 | 24 | 12 | 23 | 3 | 12 | 100 |
| Career/ Technical | 16 | 28 | 17 | 28 | 1 | 10 | 100 |
| Vocational | 8 | 16 | 11 | 50 | 2 | 13 | 100 |
| Other | 18 | 19 | 9 | 34 | 7 | 13 | 100 |

## OTHER VARIABLES

The degree to which the community college offers a "second chance" educational opportunity for a certain percentage of the population is reflected in the data reported in Chapter 4. Evidence was presented there to show that colleges attracted students from an older age group than are enrolling at university. Furthermore, a significant proportion of college students have been away from formal education for several years which, in many cases, was terminated well below the level of high school graduation. It is important that Chapters 4 and 5 be considered together in assessing the overall profile of the community college student.

## DIFFERENCES BETWEEN FULL-TIME AND PART-TIME COLLEGE STUDENTS

As was discussed in Chapter 3, the growth of full-time enrolments in post-secondary education in recent years paralleled a similar increase in secondary school enrolments. The increased participation in post-secondary education of the population as a whole can be accounted for largely by the dramatic increase in part-time enrolments. Consequently a profile of the part-time student is of particular interest.

In terms of enrolment status (full-time or part-time), college students were found to fall into two major groups: full-time students taking five courses or more (62%) and part-time students taking two courses or less (28%). Only 10% of students were enrolled in three or four courses. The latter group tend to be more similar to the one or two course group than to the full-time group. Consequently, it seemed appropriate in this section to restrict discussion to the two major groups: *full-time* students taking five courses or more and *part-time* students taking two courses or less.

Table 5-10 presents a summary of the most significant areas of difference between part-time and full-time students. These results are based on the responses of the over 6500 college students who were among the respondents to the 1972 Post-Secondary Student Survey.

**TABLE 5-10**
**DIFFERENCES BETWEEN FULL-TIME AND PART-TIME COLLEGE STUDENTS**
**(percentages)**

| | Full[1] Time | Part[2] Time | All Students |
|---|---|---|---|
| 1. Proportion of students | 62 | 28 | 100 |
| 2. Sex | | | |
| - Male | 64 | 24 | 53 |
| - Female | 57 | 33 | 47 |
| 3. Age | | | |
| - less than 20 | 77 | 14 | 54 |
| - Aged 20-24 | 55 | 29 | 25 |
| - 25 and over | 28 | 63 | 21 |
| 4. Program | | | |
| - Vocational | 88 | 10 | 10 |
| - Career/Technical | 79 | 14 | 20 |
| - Academic Transfer | 69 | 22 | 47 |
| - College Preparatory | 28 | 45 | 13 |
| - General Education | 25 | 62 | 10 |
| 5. Years since secondary school | | | |
| - less than 1 year | 78 | 13 | 45 |
| - 1 year | 72 | 16 | 12 |
| - 2-4 years | 56 | 29 | 18 |
| - 5-9 years | 39 | 48 | 11 |
| - 10 or more years | 24 | 68 | 14 |
| 6. Highest grade completed | | | |
| - Grade 13 | 34 | 58 | 6 |
| - Grade 12 | 72 | 21 | 67 |
| - Grade 10 & 11 | 39 | 40 | 22 |
| - Grade 9 or less | 55 | 22 | 5 |
| 7. Secondary school average | | | |
| - A | 59 | 36 | 3 |
| - B | 61 | 31 | 20 |
| - C+ | 67 | 24 | 40 |
| - C | 59 | 27 | 32 |
| - P | 51 | 30 | 5 |
| 8. Time of decision to continue beyond secondary school | | | |
| - Grade 11 or earlier | 71 | 19 | 52 |
| - Grade 12 | 65 | 25 | 15 |
| - After leaving school | 51 | 35 | 33 |
| 9. Intention to continue beyond present institution at | | | |
| - University | 65 | 25 | 58 |
| - Technical institute | 56 | 28 | 14 |
| - Community college | 35 | 46 | 7 |
| - Other | 58 | 31 | 10 |
| - No plan to continue | 70 | 22 | 11 |
| 10. Immediate plans after college | | | |
| - Study full-time | 75 | 14 | 32 |
| - Work full-time | 76 | 16 | 17 |
| - Work and study | 37 | 50 | 18 |
| - Travel | 66 | 24 | 7 |
| - Undecided | 63 | 25 | 16 |
| - Other | 36 | 57 | 10 |
| 11. Highest level of education expected during lifetime | | | |
| - Trade qualification | 70 | 23 | 7 |
| - College or technical institute | 64 | 23 | 18 |
| - Bachelor's degree | 62 | 28 | 21 |
| - Professional or post graduate | 65 | 24 | 21 |
| - No idea | 57 | 32 | 33 |
| 12. Most important objectives of post-secondary education | | | |
| - Job skills | 69 | 22 | 30 |
| - Critical thinking | 60 | 28 | 24 |
| - Emotional adjustment | 59 | 32 | 16 |
| - Broad outlook | 57 | 33 | 30 |

1. Full-time students taking 5 courses or more.
2. Part-time students taking 2 courses or less.

Full-time and part-time students did not differ significantly in terms of family income, father's occupation and father's education, with the exception that students whose fathers had completed less than Grade 8 were somewhat less inclined to be enrolled full-time than the rest (56% vs 62%) and more inclined to be part-time (34% vs 28%).

With reference to Table 5-10, males were somewhat more inclined to be enrolled full-time than females. Over three-quarters of students under 20 were enrolled full-time, compared to only about one-quarter of those 25 and over. Only 10% of vocational students were enrolled part-time compared to 20% of academic transfer and 60% of general education students.

The longer the time since leaving secondary school, the more likely were students to enrol part-time. Only about 10% of students who had just graduated from secondary school were enrolled part-time, compared to 70% of those who had left 10 or more years ago.

Of college students who had completed Grade 12, 72% were enrolled full-time and 21% part-time. Interestingly, among those who did not complete high school, the proportion enrolled full-time increased as their level of formal schooling decreased: thus, while only 39% of students who had completed Grade 10 or 11 were enrolled full-time the proportion increased steadily to 66% of those whose formal schooling stopped in Grade 7.

Students were somewhat more inclined to enrol full-time if their academic record in secondary school was average (neither particularly good or particularly bad), if they decided to continue on to post-secondary education prior to their last year in secondary school and if they intended to continue on to university. Those intending to work or study full-time after college and those who were most interested in the job training aspects of post-secondary education were also somewhat more likely to enrol full-time than part-time.

Perhaps the most interesting conclusion about differences between full-time and part-time students is that these are not related to their socio-economic backgrounds but rather to characteristics of the individuals themselves, their academic histories and personal goals.

## SUMMARY

In socio-economic terms, community colleges attract a much more heterogeneous group of students than the universities or the technical institute. In virtually all variables examined (father's education and occupation, family financial status, time of decision to continue education beyond secondary school) college students reflected a population far more comparable to the general population than did students attending the more traditional institutions. This pattern appeared to be consistent at both the provincial and regional level. In the popular use of the term, community colleges are democratizing agents in an educational context.

The student population in the community colleges, although more closely approaching the socio-economic pattern of the community, might still be regarded as

a selective group. Significant differences were found to exist in all socio-economic variables between students and the population at large at both provincial and regional levels. It might be concluded that despite the efforts made and the policies adopted, colleges generally are still not attracting a fully representative sample of the population. Many potential students from the lower end of the socio-economic scale are not yet enrolling in the colleges. Time may increase the attractiveness of colleges or perhaps even greater efforts are needed to interpret their role to the community at large.

When college students were viewed according to their program of study, another pattern emerged. Academic transfer students, who may be considered to be planning to continue on to university, were much more comparable to university students in socio-economic terms than were other college students. Although there were wide variations among transfer students in terms of academic achievement, father's occupation and education, and financial status, they were rather similar to students entering university directly. This observation has implications for those who wish to study the influences of socio-economic factors upon educational goals. Although their routes might be different, the eventual objectives of transfer students and direct entry students seem to be similar.

Differences between full-time and part-time students were found to be related to their individual characteristics, academic history and personal goals rather than to their socio-economic backgrounds.

The case for the college as a democratizing agent in post-secondary education is generally supported by the evidence presented in this chapter. With some reservations, the goals and expectations of college personnel are being achieved in this regard. Furthermore, the colleges are providing second chance educational opportunities for many.

Chapter 6

# THE COLLEGE STUDENT — OPINIONS AND EXPECTATIONS

The comprehensive community college has produced not only curricula of varied scope, but a student clientele with diverse backgrounds. As the growth of the two-year colleges continues, it appears likely that the variations already found to exist within this student body will continue to widen.

Although relatively little is known about the relationship between an individual's attitudes and values and his decisions in life, his opinions and expectations certainly play a major role. For this reason, the opinions and expectations of community college students are an important aspect of any wide-ranging assessment of community colleges.

Published literature about the opinions and expectations of college students is generally restricted to such topics as health, marriage, and vocational objectives. In British Columbia, the views of college students and of potential college students had not been systematically investigated prior to this study. However, the results presented in this chapter begin to shed some light on them, particularly in relation to educational objectives.

Data about the opinions and expectations of students were obtained from the Opinion Survey of 1971 and the Post-Secondary Survey of 1972. While the former included only students enrolling for the first time at community colleges, the latter covered all post-secondary institutions and is the principal source of the results reported here. These are discussed under the following headings:

— Educational Decisions;
— Educational Objectives;
— Educational Expectations;
— Views of the Post-Secondary Educational System;
— Student Satisfaction;
— General Knowledge of Educational Institution;
— Plans After College.

## EDUCATIONAL DECISIONS

Students were asked which individuals had been the most influential in helping them to decide their future educational plans. It was found that parents and family,

relatives, and friends were the three most important groups helping or influencing students in their decisions concerning future educational plans. In the opinion of students, teachers and counsellors played only a minor role in this matter (Table 6-1).

TABLE 6-1
RELATIVE IMPORTANCE OF INDIVIDUALS IN INFLUENCING STUDENTS' DECISIONS CONCERNING FUTURE EDUCATIONAL PLANS
(Percentages) [1]

| Important Individuals | College | University | Vocational School | Technical Institute |
|---|---|---|---|---|
| Parent/guardian | 46 | 65 | 34 | 54 |
| Friend | 16 | 13 | 20 | 17 |
| Relative | 13 | 14 | 16 | 13 |
| Employer/professional person | 8 | 5 | 9 | 11 |
| Secondary school teacher | 6 | 11 | 3 | 2 |
| Secondary school counsellor | 5 | 5 | 6 | 6 |
| Other counsellors | 4 | 1 | 25 | 2 |
| College student, past or present | 3 | 3 | 1 | 3 |
| College instructor or counsellor | 3 | 1 | 1 | 3 |
| Other | 18 | 13 | 20 | 15 |

1. Percentages do not total 100 since students were allowed to mark all response options applicable.

## Parents and Family

Nearly one-half of all students stated that their parents were the individuals most influential in helping them to make their educational decisions. Friends and relatives complemented the parental influence, but to a lesser degree. While "out of family" influences are growing in to-day's society, the results of the study clearly support the view that the family is still the single most influential body in the decision-making process of individuals.

Young students, academic transfer students, and students from the upper socio-economic levels (as determined by father's occupation), all relied on parental guidance to a greater degree than did other students. The financial involvement of parents in these cases may be a contributing motivating force. Equal proportions of both sexes indicated reliance on parental advice.

While college, vocational school and technical institute students demonstrated close similarities in their responses regarding the importance of parental influence, university students were more dependent on family ties. Possible explanations for this are two-fold: 1) college students tend to be somewhat older than university students and consequently more independent, and 2) financial obligations at university are normally at least double those at college, thereby imposing a somewhat greater motivation for university students to follow "parental advice," especially if dependent on their financial support.

The importance of family support cannot be over emphasized: nearly one-half of students and their families were equally agreed upon the importance of college

attendance. Only in a minority of cases, one in five, did students indicate that they were more eager for a college education than their families. Students with higher academic ability (C.A.A.T. scores greater than 64) tended to receive more support in their educational efforts from their families than did other students.

The wide range of student opinion that appears so often in this chapter is also in evidence here. While there are differences amongst the various types of post-secondary institutions, there are more prominent differences between programs within the institutions than between institutions. For example, within the colleges, academic transfer students reported greater parental influence than vocational program students.

**Counsellor**

While many colleges in British Columbia require prospective students to *see* a college counsellor prior to completing their initial enrolment, only half of first time students reported having *consulted* a counsellor. The reason for the difference between what should have been close to a 100% figure and the observed 52% figure is not clear. It is possible, however, that while new students are required to meet with a counsellor at least once, their discussion may be on more imminent matters such as programs and timetables for the upcoming semester, rather than on long-range educational and career goals.

About 20% of the students who consulted counselling staff about their future educational plans found them to be the most helpful of the persons they consulted. However, with regard to students' long-term educational expectations, professional counsellors, whether at college or secondary school, had little influence. All told, only 10% reported counsellors as influential compared to 73% reporting parents, friends and relatives.

The reason for the apparently limited influence of counsellors is not clear. It may be due to insufficient time for establishing useful dialogue with students, or it may be related to the dissatisfaction with the nature of counselling services which was expressed in several local studies[1,2] of former community college students.

Nevertheless, a conclusion which can be made is that greater emphasis should be placed by colleges on ensuring that the families and friends of students have access to useful material upon which decisions may be made.

**Instructor**

Faculty members in the British Columbia colleges have traditionally been looked upon as "instructors." Unlike some United States colleges where part of the workload of an instructor is formal counselling, the B.C. counterpart has no such obligation.

Student consultation with college instructors regarding future educational plans was virtually non-existent. While it may be expected that college instructors would be in an ideal position to advise students, the students apparently either did not share this opinion or did not have the opportunity for such consultation. In fact, very few of the students who contacted instructors regarded their advice as influential. While the students surveyed had been at college for less than one month

1. Gordon Jones and John D. Dennison, *The Partial Non-Persister Community College Student*, Vancouver Community College, Vancouver, B.C., March 1973.
2. Gordon Jones and John D. Dennison, *A Comparative Study of Persister and Non-Persister College Students*, Vancouver Community College, Vancouver, B.C., June 1972.

and may not have become accustomed to seek advice from teaching faculty about their educational plans, they did not show any significant tendencies to consult professional educators in the past either. Even in secondary school, no more than 5% of students reported the secondary school teacher as most important in helping or influencing decisions concerning future educational plans.[3]

## EDUCATIONAL OBJECTIVES

Students are the group within the community which is most immediately concerned with the objectives of the educational system. Yet, their views have generally been overlooked by society. As part of the *Impact Study*, students were asked their opinions concerning the four most commonly stated goals of post-secondary education. The results indicate that there is no concensus amongst students on basic educational objectives. Not only did the results vary widely between institutions, but also from program to program within institutions. For community college students, two objectives emerged as the most important: 1) the learning of skills that lead to a job, and 2) the development of a broad general outlook on a variety of subjects (Table 6-2).

TABLE 6-2
MOST IMPORTANT OBJECTIVE OF POST-SECONDARY EDUCATION AS VIEWED BY POST-SECONDARY STUDENTS
(Percentages)

| Objective | College | University | Vocational School | Technical Institute |
|---|---|---|---|---|
| Skills that lead to job | 30 | 27 | 59 | 48 |
| Broad general outlook | 30 | 30 | 16 | 15 |
| Skills and habits for critical thinking | 23 | 28 | 17 | 26 |
| Social and emotional adjustment | 17 | 15 | 8 | 11 |
| Total | 100 | 100 | 100 | 100 |

### Job Skills

The occupational aspect of education was a paramount objective in the minds of many students. Three out of ten college and university students indicated the major objective of post-secondary education to be the learning of skills that lead to a job. This figure doubled to six out of ten vocational school students and to one-half of technical institute students. The necessity for a comprehensive approach to community college development is evident when the variety of objectives listed by college students is observed. The proportion of students listing job skills varied widely amongst college programs with over 50% of vocational program students indicating this objective compared to about 40% of career/technical students and 20% of academic transfer students (Table 6-3). Younger college students were found to be more job oriented than the older ones.

3. Working Report #8, *Impact Study* series, July 1973.

TABLE 6-3
MOST IMPORTANT OBJECTIVE OF POST-SECONDARY EDUCATION AS VIEWED BY POST-SECONDARY STUDENTS ACCORDING TO COLLEGE PROGRAM AND AGE
(Percentages)

| Objective | College Program | | | | Age | | |
|---|---|---|---|---|---|---|---|
| | Career Technical | Vocational | Academic Transfer | Other | Under 20 | 20-24 | Over 24 |
| Skills that lead to job | 42 | 54 | 22 | 28 | 35 | 26 | 21 |
| Broad general outlook | 21 | 18 | 34 | 30 | 29 | 29 | 34 |
| Skills and habits for critical thinking | 22 | 17 | 26 | 24 | 21 | 28 | 26 |
| Social and emotional adjustment | 15 | 11 | 18 | 18 | 15 | 17 | 19 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

### Broad Outlook and Critical Thinking

While job related skills were undoubtedly of great importance, the development of a broad general outlook in a variety of subjects, and the development of skills needed in critical thinking were listed by the next largest group of students. Once again, there was wide variation in the responses from different types of institutions. College and university students were twice as likely to indicate these objectives as were vocational and technical institute students. Within the colleges themselves, considerable differences of opinion were found as to the objectives of post-secondary education. These differences were related to college programs, with academic transfer students more inclined to a view emphasizing a broad general outlook rather than job skills.

## EDUCATIONAL EXPECTATIONS

A surprisingly large number of students had no clear goals concerning their highest level of education but among those who did, a university degree was the most common objective (Table 6-4).

Almost 40% of college students expected to obtain some sort of university degree. These expectations are not in line with reality since only about 5% transfer from college to university. Even among academic transfer students only 20% actually transfer, compared to 58% indicating transfer expectations. In other words, the expectations of a large proportion of college students are not being realized.

The attainment of a "trade qualification" or a "technical institute diploma" was the expected objective of 15% of college students. Percentages differed according to college program, with 52% of students in the career/technical and vocational programs indicating educational expectations other than a university degree.

While the community college has provided the opportunity for two years of post-secondary education to many citizens, the impact of socio-economic barriers is still evident when individuals consider their further education or training. While many students from lower socio-economic backgrounds aspired toward a university degree (34%) the percentage among higher socio-economic students was considerably greater (47%).

TABLE 6-4
HIGHEST LEVEL OF EDUCATION EXPECTED TO BE ATTAINED BY POST-SECONDARY STUDENTS DURING THEIR LIFETIME
(Percentages)

| Highest Level Expected | College | University | Vocational School | Technical Institute |
|---|---|---|---|---|
| Graduation from secondary school | 1 | 0 | 1 | 0 |
| Trade qualification | 6 | 1 | 48 | 1 |
| Community college, one or two years | 8 | 1 | 4 | 0 |
| Technical institute diploma | 9 | 1 | 5 | 55 |
| Bachelor's degree | 13 | 19 | 4 | 6 |
| Teaching certificate with B.Ed. | 8 | 11 | 1 | 1 |
| Professional degree | 10 | 21 | 1 | 6 |
| Master's degree | 7 | 12 | 1 | 2 |
| Ph.D. | 4 | 9 | 1 | 2 |
| No idea | 34 | 25 | 34 | 27 |
| Total | 100 | 100 | 100 | 100 |

The development of college curricula and of a consistent college philosophy may be handicapped by the rather large proportion of students (about 30%) who indicated that they had no idea as to the highest level of education they expected to attain. This indecision was not related to age, with mature students indicating as much indecision as college-age students.

University students were somewhat clearer regarding their ultimate educational goals than were college or vocational school students, with only one-quarter reporting "no idea" about their highest expected educational attainment. It may be assumed that the lack of decision here is at least partly concerned with the extent of degree attainment and that university students are, therefore, more committed as to future direction than college and vocational school students.

As was the case for college students, socio-economic status seemed to have some bearing on university students' educational expectations, but from a different standpoint. A slightly greater percentage of students from low socio-economic categories (24%) looked to a Bachelor's degree as their top attainment than did higher category students (18%). A greater percentage of low category students (18%) aimed for the Bachelor of Education degree than did the higher category (9%). Yet, at the graduate level the difference in percentages was small. In other words, socio-economic status did not appear to present a significant barrier to intended study at the graduate level.

Evidence collected in the community aspect of this study (Chapter 10) indicates that there is a general feeling in the community that students have a basically "lazy" attitude, reflecting the theory that "someone else owes me a living." If credence can be given to student responses to the question, "How important is it that you finish college?", then the community concern about today's student is not supported. Ninety percent of students indicated that completion of college is at least "somewhat" important. In other words, no more than one-tenth of students

looked upon completion as "not of importance" and these tended to be over twenty-five years of age.

Further to this, the seriousness of college study to the vast majority of students is reflected in their attitude toward the importance of good grades. Less than 5% indicated that good grades were *not* important.

It may well be concluded, therefore, that today's college students are basically sincere and determined to be successful in their educational endeavours, regardless of level of expectation.

## VIEWS OF THE POST-SECONDARY EDUCATIONAL SYSTEM

### Choice of Institution

In considering the choice of a post-secondary institution, the particular programs available, closeness to home and low cost were regarded as the most important influences (Table 6-5).

TABLE 6-5
FACTORS CONSIDERED MOST IMPORTANT BY STUDENTS IN SELECTING A POST-SECONDARY INSTITUTION
(Percentages)[1]

| Factors Influencing Choice of Institution | College | University | Vocational School | Technical Institute |
|---|---|---|---|---|
| Particular programs available | 43 | 41 | 57 | 80 |
| Close to home | 41 | 34 | 31 | 12 |
| Low cost | 34 | 10 | 22 | 23 |
| Stepping-stone to another institution | 29 | 9 | 9 | 5 |
| Good teaching | 20 | 35 | 28 | 56 |
| Did not consider other alternatives | 8 | 23 | 13 | 9 |
| Broad, general program offered | 7 | 9 | 10 | 3 |
| Good intellectual/ research reputation | 6 | 18 | 10 | 23 |
| Friends going | 4 | 13 | 2 | 2 |
| Advice of parent/ guardian | 3 | 11 | 4 | 4 |
| Extra-curricular activities | 1 | 4 | 1 | 1 |
| Good physical facilities | 1 | 4 | 4 | 2 |
| Chance to live away from home | 2 | 9 | 8 | 2 |
| Easier to gain admission | 6 | 3 | 9 | 1 |
| Refused admittance to first choice institution | 4 | 2 | 7 | 2 |

1. Percentages do not total to 100 since students were allowed to mark up to three response options.

Program availability was a determining influence for 40% of college and university students, for over 50% of vocational school students and for 80% of technical institute students. While for community college students in academic transfer

programs the availability of programs was not a consideration, for the career/technical and vocational college students it was of major importance. A priority in the post-secondary system would then seem to be the provision of programs sought by the students. The institutions which do so will have the greatest impact within the system.

The community colleges have indicated that they are teaching institutions, and that unlike the universities, where there is a mix of teaching and research, they will concentrate solely on instruction. Of all post-secondary students, college students placed the least importance on good teaching — yet, colleges take pride in being teaching institutions.

Closeness to home was an important factor for many students especially at the colleges, where 40% rated this aspect as important. However, it must be pointed out that since the type of program offered is the most important consideration in the choice of post-secondary institution, students intending to go to university, vocational school, or technical institute have little freedom of choice concerning location and therefore could not let "closeness to home" be a factor. On the other hand, community colleges campuses have been located in strategic population centres throughout the province, a practice that is clearly well-justified.

While the low cost of attending community colleges has opened the possibility of post-secondary education to segments of the population hitherto unable to attend institutions of higher education, it has not greatly affected reasons for the choice of particular institutions. Regardless of the socio-economic status of students, their reasons for choosing an institution varied no more than 2%. In other words, while one-third of college students reported low cost as a consideration in their choice of college, the percentage was not higher for low socio-economic students. Thus, among college students low cost is of equal importance at all socio-economic levels. Low cost was of lesser importance to students in vocational schools (22%), the technical institute (23%), and universities.

### Important Aspects of Instructors

Regardless of the type of post-secondary institution attended, first time students considered "good teaching skills" as of the utmost importance (Table 6-6). Over one-half of all students reported this view, with university and technical institute students expressing this opinion to a far greater degree than college or vocational school students. Second in importance is the belief that the instructor should be knowledgeable in his own subject area. This is virtually assured in the province's post-secondary system by the high level of expertise required for instructors. However, the most highly rated characteristic, good teaching, is left purely to chance as no formal assessment or certification of teaching skills is required.

### Fee Considerations

The issue of tuition fees has been, and still is, a contentious one. In the main, student fees have remained relatively stable during the past decade even in the face of inflation.

While community college fees are low in comparison with university fees, advocates of free tuition point to the larger proportion of low socio-economic status students attending college compared to the proportion attending university. They suggest that tuition fees could still be a major barrier to universal accessibility.

Bearing this point in mind, the results of the student survey were somewhat unexpected in that only two-fifths of students advocated free tuition (Table 6-7).

TABLE 6-6
CHARACTERISTICS CONSIDERED BY STUDENTS TO BE MOST IMPORTANT IN A POST-SECONDARY INSTRUCTOR
(Percentages)[1]

| Important Characteristics | College | University | Vocational School | Technical Institute |
|---|---|---|---|---|
| Good teaching skills | 50 | 65 | 52 | 66 |
| Knowledgeable in own subject area | 42 | 47 | 47 | 50 |
| Approachable personality | 30 | 28 | 32 | 29 |
| Broad knowledge of related fields | 20 | 19 | 23 | 21 |
| Encourages active class participation | 19 | 15 | 12 | 13 |
| Requires high standards | 4 | 3 | 8 | 2 |
| Good reputation with former students | 4 | 4 | 6 | 3 |

1 Percentages do not total 100 since students were allowed to mark all response options applicable.

TABLE 6-7
STUDENT VIEWS ON FREE TUITION FOR POST-SECONDARY EDUCATION
(Percentages)

| Views | College | University | Vocational School | Technical Institute |
|---|---|---|---|---|
| Tuition free education | 42 | 37 | 40 | 37 |
| Tuition payable by student | 15 | 16 | 11 | 22 |
| Conditional upon ability | 43 | 47 | 49 | 41 |
| Total | 100 | 100 | 100 | 100 |

The students from the lower socio-economic level tended to favour free tuition more (48%) than those from the middle or high levels (43% and 41% respectively). Academic transfer students were more in favour of free tuition than vocational students (43% compared to 38%); however, vocational students have by far the best opportunity to receive free tuition and maintenance through government grants and assistance programs.

A substantial proportion of college students held the position that a no tuition fee concept should be conditional upon student ability. This stand was supported by 46% of females and 39% of males. The percentages of individuals advocating the "conditional upon student's ability" approach varied somewhat with socio-economic status, but these differences were generally not significant.

The percentages of university and technical institute students responding in favour of free tuition were somewhat lower than for college students. When socio-economic factors were considered, the lower classification again showed a greater desire for the no tuition fee concept.

Another example of the wide range in the economic status of college students was their estimates of monthly expenditures, which ranged from less than $50 per month to over $300 per month. Students expected to obtain the finances for their education from a variety of sources, mostly personal savings, jobs, parents, and to a lesser degree, loans and government support (Table 6-8). A significant percentage (75%) of vocational school students relied on government programs as their main source of funds. One-half of both college and university students relied on full or part-time jobs in order to acquire sufficient funds to continue their education.

TABLE 6-8
STUDENTS' MAIN SOURCES OF FUNDS FOR POST-SECONDARY EDUCATION
(Percentages)[1]

| Source of Funds | College | University | Vocational School | Technical Institute |
|---|---|---|---|---|
| Personal savings | 32 | 34 | 18 | 56 |
| Part-time job | 31 | 44 | 11 | 31 |
| Full-time job | 18 | 6 | 7 | 2 |
| Parents | 18 | 31 | 5 | 21 |
| Loans | 5 | 8 | 2 | 12 |
| Scholarship, bursary | 5 | 27 | 1 | 14 |
| Spouse | 7 | 2 | 7 | 7 |
| Government program | 8 | 4 | 75 | 4 |
| Other | 3 | 2 | 9 | 3 |

1. Percentages do not total to 100 since students were allowed to mark up to two response options.

Two-thirds of post-secondary students reported monthly expenses at or below $150. There was, however, one exception to this pattern. Vocational program students at both community colleges and vocational schools reversed the trend with nearly two-thirds reporting expenditures of over $150 per month. In fact, 20% of vocational students spent in excess of $300 per month compared with less than 6% of university and college students, and 4% of technical institute students. However, it must be remembered that vocational students are considerably older than other students and, therefore, more likely to be living independently or even supporting a family. As was pointed out, over half of the vocational students were receiving government support and relied far less than other students on personal savings and jobs to finance their education. College and university students from the low socio-economic category indicated approximately the same monthly expenses as did students from the middle and upper levels. However, older students reported much higher expenditures than did younger ones.

## Student Society

The majority of provincial colleges require students to pay a fee to belong to the college's student society. Arguments in the past to justify this position have come from administration and college councils to the effect that all students benefit from student society activities. However, over half of the students surveyed felt that there should be no compulsory student society fees. A further one-quarter of students were unsure whether compulsory fees should be charged or not.

Career/technical students, males, and older students were more inclined to oppose the collection of compulsory student society fees than other students.

Part of the overall impact of education is the involvement of students in activities other than those traditionally associated with education and training, and involvement with student society activities may be part of an overall educational process. While the success of students' councils is often questionable in the light of general student apathy, the responses of students entering the colleges for the first time indicate a more positive view point. At least two-thirds of students felt that student council activities should go beyond social events. When questioned further on this point, nearly 90% felt that all matters of interest to college students should be in the area of student council involvement. Academic transfer and younger students tended to reflect this position somewhat more positively than others. Almost half of the student body felt that all matters of general interest to the community could be considered by a student council. From these views it may be concluded that organized student council activities have the support of most students and could have considerable impact on college direction.

## STUDENT SATISFACTION

Two areas of student satisfaction were studied: 1) those in which students would expect to find their greatest life satisfaction, and 2) those which are important in terms of the students' personal satisfaction while at college.

### Greatest Life Satisfaction

While student responses on this item differed considerably among the four types of post-secondary institutions, there were definite similarities in responses according to program. In other words, academic transfer students from the colleges responded in a similar manner to university students, vocational college students had similar view points to vocational school students, and technical institute students expressed reasonably similar views to the colleges' career/technical students. Thus, student differences were more pronounced by program than they were by institution (Table 6-9).

Marriage and a family would provide the greatest life satisfaction for approximately one-third of university, vocational, and technical institute students, and for one-quarter of college students. Age was not a factor in response to this item. Following in importance were career, occupational or professional activities, and leisure time activities such as sports. At a time when there is increasing awareness of world problems and concern for the "ills of society," it was noted that such options as improving life for others, religious activities, literature, art, music, community activities, and politics did not rate highly.

Various socio-economic characteristics of students were compared with their expectations concerning greatest life satisfaction. Some of the findings may be considered self-evident and not unexpected, yet others were somewhat surprising. The factors studied were the student's secondary school grade point average, father's and mother's occupation, father's and mother's education, and family's financial position, each matched against the individual student's "life satisfaction."

TABLE 6-9

ACTIVITIES IN WHICH POST-SECONDARY STUDENTS EXPECT THEIR GREATEST LIFE SATISFACTION

(Percentages)[1]

| Activities | College | University | Vocational School | Technical Institute |
|---|---|---|---|---|
| Marriage and Family | 26 | 31 | 36 | 41 |
| Career, occupational activities | 24 | 20 | 31 | 33 |
| Professional/ intellectual activities | 19 | 28 | 7 | 13 |
| Humanitarian activities | 15 | 15 | 12 | 11 |
| Leisure time activities, sports | 15 | 23 | 12 | 27 |
| Literature, art, music | 12 | 12 | 7 | 5 |
| Making money, business | 11 | 9 | 25 | 14 |
| Religious activities | 4 | 5 | 4 | 4 |
| Community activities, politics | 3 | 3 | 1 | 2 |
| Other | 11 | 9 | 15 | 8 |

1. Percentages do not total to 100 since students were allowed to mark-up to two response options.

Looking first at secondary school grade point average, as it decreased there was a steady decline in the proportion of students who felt that life satisfaction would be found in professional or intellectual activity. The proportion fell from 18% of "A" grade (4.0 g.p.a.) students to 12% of "P" grade (1.0 g.p.a.) students. Further, the interest in making money rose sharply from 3% of "A" students to 22% of the "failing" students, and those placing high importance on leisure represented 8% of the top achievers and 13% of the low achievers.

Just what influence the father and mother of a student would exert on life's satisfaction was difficult to assess. There was, however, some indication that the offspring of fathers whose occupation was of a managerial or professional nature were more inclined to find satisfaction in professional or intellectual activities than in career or occupational pursuits. No strong trends were revealed in relation to mother's occupation.

The educational levels of fathers had a similar impact as their occupations. Students whose fathers had a university education were most likely to expect their greatest life satisfaction to be in professional or intellectual activities and least likely in career or occupational pursuits. Mother's education, like occupation, did not show any significant relationships.

Family finances provided some interesting observations. Students from families whose annual income was rated as "far above average" (where average was defined as $10,000 per year) were less likely to be interested in satisfaction through a career or occupation, in improving the life of others and somewhat more interested in professional and intellectual activities and in earning money.

## Personal Satisfaction at College

While the previous section dealt with the expected lifetime satisfaction of students, this section considers the personal satisfaction which students expected to find in their educational institutions. Some members of the community express

the view that today's college students are frivolous and disinterested in a "real" education. This is not, however, supported by the results of this study. Items which implied a strong dedication to education and effort were indicated by a majority of students from all types of post-secondary institutions (Table 6-10).

TABLE 6-10
IMPORTANT ITEMS OF STUDENT SATISFACTION
DURING POST-SECONDARY EDUCATION
(Percentages)[1]

| Important Factors | College | University | Vocational School | Technical Institute |
|---|---|---|---|---|
| Study in field of major interest | 40 | 46 | 43 | 55 |
| Discovery of new ideas, interests | 38 | 40 | 37 | 36 |
| Academic competition, good grades | 38 | 43 | 49 | 52 |
| Acquiring general knowledge | 33 | 35 | 37 | 31 |
| Social life | 15 | 27 | 16 | 24 |
| Athletics | 10 | 13 | 11 | 9 |
| "Rap" sessions | 10 | 12 | 11 | 13 |
| Individual artistic or literary work | 9 | 8 | 5 | 3 |
| Student activities | 6 | 7 | 5 | 8 |

1. Percentages do not total to 100 since students were allowed to mark up to three response options.

Self-discovery, insight, the discovery of new interests and talents, course work, academic competition, the getting of good grades, and individual study or research all ranked high in importance to students. Such items as social life, parties, athletics, "rap sessions" with other students, and individual artistic or literary work, while obviously of considerable importance to some students, were not of consequence to the vast majority. In light of previous evidence which indicated that students expected considerable "input" in general college affairs, it was rather unexpected to find such a lack of personal satisfaction in the various student activities. While this may reflect an indifference on the part of the vast majority of students concerning involvement in student affairs, it may also indicate dedication to course work. Where satisfaction was expressed in student activities, it was usually by the younger student.

The ability of students as measured by the C.A.A.T. was not, for the most part, a distinguishing feature in their personal satisfaction. However, students with higher ability were definitely less interested in athletics and student government than were students with lower ability. The acquiring of good grades and the academic competition involved were important elements of personal satisfaction for at least one-third of the students and, depending upon the program in which they were enrolled, for as many as one-half of the students. As has been noted previously in this chapter, there were closer similarities here among students according to program rather than according to type of institution.

## GENERAL KNOWLEDGE OF EDUCATIONAL INSTITUTION

If the impact of community colleges in British Columbia were to be measured purely by the knowledge of students about their college at the time of first enrolment, then that impact might be considered to be minimal. Students generally knew very little about their college. Two basic areas of "knowledge" were examined.

### General Knowledge about the Institution

A greater percentage of university, vocational school, and technical institute students were familiar with their institution's course offerings, course requirements, general philosophy, and instructional reputation, than were community college students (Table 6-11). For example, while course work requirements were apparently understood by 62% of vocational school students, 59% of university students, and 70% of technical institute students, this was true for only 37% of college students. Further, within the college itself, the academic transfer student was less inclined to be familiar with course work requirements than the vocational and career/technical student. The difference is hard to explain, especially in view of the fact that college counsellors visit secondary schools to present information to potential college students (and in some cases also to their parents), college administrators endeavour to explain academic and training requirements in college publications, and instructors state their expectations during the first class sessions. In spite of all this, knowledge about many educational aspects of the college remain obscure to a large proportion of beginning students.

TABLE 6-11
POST-SECONDARY STUDENTS' FAMILIARITY WITH VARIOUS ASPECTS OF THEIR INSTITUTION
(Percentages)[1]

| Aspect | College | University | Vocational School | Technical Institute |
|---|---|---|---|---|
| Transferability of credit | 39 | 23 | 9 | 17 |
| Variety & extent of course offerings | 39 | 47 | 47 | 49 |
| Course work requirements | 37 | 59 | 62 | 70 |
| General philosophy of institution | 21 | 20 | 24 | 58 |
| Instructional reputation | 20 | 42 | 27 | 67 |
| Individualized help from faculty | 15 | 24 | 23 | 41 |
| Number of students attending | 14 | 59 | 14 | 36 |
| Extracurricular activities | 13 | 37 | 19 | 39 |
| Availability of independent courses of study | 13 | 13 | 16 | 16 |
| No response (interpreted as "no knowledge") | 18 | 9 | 11 | 2 |

1. Percentages do not total to 100 since students were allowed to mark all response options applicable.

From the early days of the college movement in British Columbia, considerable time and effort has been spent at the colleges and the universities to facilitate transfer to university. In spite of this effort, only one-half of academic transfer students indicated familiarity with transfer procedures. However, since only 20% of academic transfer students actually do transfer to a university, perhaps this is not surprising.

Additional analysis indicated that academic transfer students who were younger and came from a higher socio-economic group had slightly better knowledge of their college than did other students. When the academic ability of students was considered, the low ability student was more inclined to know what was expected of him at college but less likely to be familiar with college philosophy or transfer procedures than the high ability student.

In general, community college students are less knowledgeable about their institution upon first enrolling than are students at university, vocational school or technical institute. The effectiveness of the community college in serving the community comes into question when such large numbers of its students know so little about important areas of college operation. This ignorance is even more difficult to understand considering that the majority of students are required to consult with college counsellors prior to enrolment.

### College Expectations

While first-time college students indicated rather limited knowledge of the various aspects of college education, there seemed little doubt as to what they expected at college. The majority expected "good teaching" (97%), yet very few indicated they knew anything about the academic reputation of their college (20%) and about course requirements (39%). Some 87% expected to find "good educational and vocational counselling," but only 20% stated that they knew about the general philosophy of the college. Only two of five students seemed to know what was really expected of them as far as reading, written work, participation in discussion and original thinking were concerned. Three-quarters of the male students and 82% of the female students expected an "opportunity for independent study," and yet one-third of male students and 39% of female students reported no knowledge of the ratio of required courses to electives; similar proportions reported no knowledge of the availability of specialized, independent courses of study.

On the whole, one point was very clear: although students have definite expectations concerning college in their first month of attendance, they have very little knowledge about its philosophy, requirements and range of programs.

## PLANS AFTER COLLEGE

The immediate plans of students after leaving college were varied (Table 6-12). The largest single group (one-third) planned to continue with their education on a full-time basis. Almost 45% of academic transfer students indicated plans to continue with full-time education. If it is assumed that this full-time education is university education, there is a wide discrepency between the proportion of students planning to continue to university and the 20% who actually do so. Male stu-

dents are more inclined to plan to continue their education on a full-time basis than females. College students under 20 years of age are also far more likely to plan to continue their education than the 20-24 year age group (40% to 29%). In addition, students from the low socio-economic group were less likely to continue.

About equal percentages of college students planned to work full-time and to work and study simultaneously. Within these two groups there were considerable differences. For example, 21% of the low socio-economic group planned to work full-time, compared to only 13% of the high group. Students over 24 years of age had a greater tendency to plan on a combined program of work and education after college than did the younger students (32% to 11%). Students from vocational and career/technical programs were least likely to indicate plans to continue education after completion of their program of study and most likely to plan to work either full-time or in conjunction with further education. Again, program was more indicative of plans than the institution type. The vast majority of college students indicated they would like to continue their education at a university. This was the case for over one-half of all students, with a higher proportion of those from the high socio-economic group looking toward university than from the low category (62% to 51%).

TABLE 6-12
PLANS OF POST-SECONDARY STUDENTS
AFTER COMPLETION OF CURRENT EDUCATIONAL PROGRAM
(Percentages)

| Plans | College | University | Vocational School | Technical Institute |
|---|---|---|---|---|
| Continue education full-time | 32 | 11 | 2 | 1 |
| Work and continue education | 18 | 9 | 17 | 12 |
| Full-time job | 17 | 30 | 57 | 57 |
| Undecided between work or education | 16 | 20 | 8 | 14 |
| Other | 10 | 10 | 14 | 5 |
| Travel | 6 | 18 | 2 | 9 |
| Get married and raise a family | 1 | 2 | 0 | 2 |
| Total | 100 | 100 | 100 | 100 |

## SUMMARY

This chapter has presented a summary of the opinions and expectations of community college students in British Columbia and compared them with those of students entering universities, vocational schools, and the technical institute.

Considerable variations in the views and expectations of college students were found on most issues. These existed on the basis of age, sex, socio-economic status and program of studies. Despite the diversity among college students, collectively they were different from students entering other post-secondary institutions.

However, there were similarities among college students and those at other post-secondary institutions on the basis of program of study. College students in

academic transfer programs were inclined to have similar views to university students on such issues as the "objectives of post-secondary education" and on their eventual educational goals. On the other hand, the views of college students in career/technical and vocational programs were similar to the views of technical institute and vocational school students, and reflected primarily a concern for employment security.

Many of the views expressed by college students have direct implications for college planners, particularly with respect to faculty, program development and the role of counsellors. Students' expectations are frequently not being realized, perhaps because of lack of familiarity with the educational system. Student views are sometimes at variance with what the public at large believe them to be.

Chapter 7

# THE COLLEGE STUDENT — CONCERNS

The growing tendency for continuing change in today's world is of concern not only to the community at large but to the community college in particular. Unlike students attending universities, many community college students must come to grips with the realities of work and of society within two years or less. At eighteen or nineteen years of age, students may lack a feeling of security about the adult roles they may soon have to assume. The older college students, being more mature, may be somewhat confused by the change from an independent life-style to one of control by the academic community.

The often sudden change in life-style from high school to college and then to employment or to an advanced level of training can require rapid development of individual maturity. Technological advances are bringing about changes in the work environment and in the operation of society generally. These changes can be of concern to students.

This chapter consists of two main parts based on the following objectives:

1) to assess the importance to students of potential problem areas that may cause them concern;
2) to determine where students would tend to seek assistance in dealing with their problems and the extent to which they would use health and counselling services that could be offered by colleges.

The survey of student concerns was carried out in conjunction with the Socio-Economic Survey of 1971 and the Post-Secondary Student Survey of 1972. These studies were described in previous chapters. Each of them included several questions dealing with student concerns.

Specifically, three types of questions were asked:

1) What are the concerns of students?
2) Where would they tend to seek assistance in dealing with them?
3) What use would they make of health and counselling services that might be offered by the colleges?

For the most part, the data presented in this chapter are taken from the Post-Secondary Student Survey of 1972.

## CONCERNS OF STUDENTS

Seven areas of possible student concern were identified and listed in the Post-Secondary Student Survey: physical illness, emotional problems, family and inter-personal relationships, financial difficulties, academic problems, and career problems.

One out of three college and university students indicated that none of the above created any concern. At the vocational schools and technical institute only one out of four students did not list any of the concerns mentioned in the questionnaire. The majority of students felt that they had at least one major problem that was causing them concern, (Table 7-1)

TABLE 7-1
CAUSES OF CONCERN TO POST-SECONDARY STUDENTS
(Percentages)[1]

| Concern | College | University | Technical Institute | Vocational School |
|---|---|---|---|---|
| Financial difficulties | 24 | 23 | 32 | 43 |
| Career problems | 18 | 21 | 16 | 20 |
| Academic problems | 17 | 25 | 27 | 9 |
| Family relationships | 13 | 12 | 13 | 16 |
| Other inter-personal relationships | 12 | 19 | 18 | 12 |
| Emotional problems | 10 | 10 | 9 | 13 |
| Physical illness | 7 | 7 | 9 | 13 |
| No response | 33 | 30 | 26 | 24 |

1. Percentages do not total to 100 since students were allowed to mark all response options applicable

Financial difficulties loomed as one of the most important problems for one quarter of college and university students, one third of technical institute students and nearly one half of vocational school students. It is sometimes argued that more governmental assistance should be provided for students at either the provincial or federal level. It is stated that such assistance would go far to relieve student anxiety and consequently to assist with the overall learning experience. However, analysis of data from the *Impact Study* does not support this statement. Seventy-five percent of vocational school students indicated their main source of funds to be a government program. In spite of this support, which covers not only tuition fees but living expenses, 43% of vocational school students, more than any of the other groups, expressed concern over finances. This applied also to the college students enrolled in vocational programs. It would seem then that the provision of funds from outside sources does not always alleviate concerns on the part of a student over finances.

Concern over funds did, however, bear some relationship to socio-economic status as represented by the occupation of the student's father. While concern over finances was expressed by students from all economic levels, the least concern (albeit 20%) was expressed by students whose fathers were classified as managers and professionals. The greatest concern (28%) was indicated by students whose fathers were classified as semi-skilled and unskilled. This trend was also evident in relation to the family's financial position Most concern over financial difficulties

was expressed by students from families with "considerably below average" financial position. One half of students from these families were concerned over financial difficulties, compared to only 16% of students from families listed as "considerably above average." The seriousness of financial difficulties for many students is emphasized by the fact that one out of three college students who withdraw from college in mid-semester list the reason for doing so as financial.[1]

Academic problems also ranked high in importance for many students. However, vocational school students expressed much less concern with this area than did students from other institutions. This was also true for college students in vocational programs, compared to students in other program areas. University students showed more concern over academic problems than college students, with females more concerned than males.

Career problems were next in importance, with relatively similar percentages observed for all institutions. Younger students appeared to be slightly more apprehensive on this matter than older students. This is consistent with data on student opinions and with data from students who have transferred from college to the employment world. With from one-fifth to one-third of students in the post-secondary system believing that their greatest life satisfaction will come from their careers, it is little wonder that students have problems and concerns in this area. Education, even at the post-secondary level, is becoming no longer sufficient in itself to sustain a career. Evidence from this study, particularly from the survey of college graduates, indicated as much stress concerning the finding of interesting work as on finding work that pays well.

The concern of college students over career problems did not have any significant relationship with variables such as the student's secondary school grade point average, parents' occupation and education, and family's financial position. However, as the secondary school grade point average of students decreased, the percentage reporting academic concerns increased. While only 9% of first-time college students with an "A" grade standing at secondary school expressed concern over academic problems, this figure jumped to 30% for "pass" category students (a "pass" grade being the equivalent of a .0 grade point average).

Students also reported concern over matters such as family relationships, physical illness, emotional problems, and inter-personal relationships. However, the percentages of students expressing concerns over these items were generally much lower than for problems related to academics, finances and careers. Physical illness appeared to be of greater concern for vocational school and technical institute students than for university and college students. Students from Trinity Western College, which is a religiously oriented institution, had the lowest concern over emotional problems (5.3%). The highest concern over emotional problems was reported by art school students (15.4%).

In the Socio-Economic Survey (1971) a special section entitled "Health Survey" was included. It questioned students about their concerns during the past year and about their anticipated concerns during the coming year. For the most part students did not expect their concerns to alter nor were they overly apprehensive that their problems would increase. However, a slightly greater proportion expected financial and academic problems during the forthcoming year than they experienced during the previous year. First-year university students expected to be less con-

1. J. D. Dennison, and G. Jones, *A Study of the Characteristics of Students Who Withdrew from Vancouver Community College During the 1969-1970 Academic Year*, Vancouver Community College, Vancouver, April 1971.

cerned in future over the various problem areas than they had been in the past.

Physical illness, which is generally regarded to be the principal reason for absence from college, failure to complete assignments, and withdrawal from class, was not rated as a major area of concern either for the present or future. This relatively low concern over physical illness may be attributable to the relatively good health of students. Over three-quarters of college and university students reported less than a week's lost time at work or in education over the last year. Females reported somewhat greater lost time due to illness than males. Over three-quarters of college students and nearly 85% of university students considered themselves to be in "good" health. "Poor" health was limited to less than 1% of respondents, with age, sex, and socio-economic status not a factor.

## WHERE STUDENTS WOULD SEEK HELP

It was mentioned previously that one out of three students responding to the Post-Secondary Survey in the Fall of 1972 did not indicate any concerns. In the same questionnaire, respondents were given the opportunity to indicate what services "could significantly help" to cope with their concerns. Fourteen possible services including medical services, academic counselling, legal advice and religious counselling were listed. Once again, one out of three students did not indicate a need for any of the services.

Career counselling was the on-campus service most in demand, with approximately one-fifth of post-secondary students desiring it. Vocational school students and those in vocational programs at comprehensive colleges were least interested in career counselling (Table 7-2). This supports the observation that vocational stu-

TABLE 7-2
POST-SECONDARY STUDENT VIEWS OF STUDENT SERVICES WHICH COULD HELP TO COPE WITH CONCERNS
(Percentages)[1]

| Services | College | University | Technical Institute | Vocational School |
|---|---|---|---|---|
| Career counselling | 18 | 22 | 16 | 17 |
| Job placement centre | 14 | 18 | 22 | 31 |
| Academic counselling | 13 | 19 | 14 | 5 |
| Financial counselling | 11 | 10 | 14 | 16 |
| Referral service (clearinghouse) | 10 | 11 | 10 | 11 |
| Medical services | 9 | 10 | 11 | 16 |
| Dental care | 9 | 8 | 12 | 19 |
| Study skills, remedial programs | 7 | 9 | 10 | 6 |
| Family/Social counselling | 6 | 5 | 4 | 8 |
| Psychiatric services | 5 | 5 | 3 | 4 |
| Legal advice | 3 | 4 | 3 | 9 |
| Family planning information | 3 | 5 | 4 | 3 |
| Religious counselling | 2 | 3 | 2 | 2 |
| Information on drugs, alcohol, tobacco | 1 | 1 | 1 | 3 |
| No reply | 32 | 31 | 27 | 23 |

1. Percentages do not total to 100 since students were allowed to mark all response options applicable.

dents have, for the most part, already decided on their career directions, a decision apparently not yet made by many academic transfer and career/technical students.

Although financial difficulties had been indicated by one-quarter to one-half of respondents as a cause of concern at the time of entering post-secondary education, only a small percentage of students (from 10%to 16%) at different institutions felt that financial counselling would be helpful. Almost one-fifth of students indicated that academic counselling would be helpful.

Assisting students with career, financial, and academic matters has through the years been considered to be a legitimate area of involvement for an educational institution. The question then remains whether assistance to students in dealing with emotional, social, and physical problems should come within the jurisdiction of post-secondary institutions. Some educational philosophies hold that in the realm of tertiary education not only the intellectual character of an individual but the "whole person" must be considered. For example, a student's concerns over family planning or birth control may interfere with his academic or vocational study.

As mentioned, a wide variety of services were suggested as possibly helpful to post-secondary students in coping with their concerns. Only 10% of students from colleges, universitites or the technical institute replied that few or none of the listed services were available to them (Table 7-3). At least half of the students could obtain most of the services. This was not the case for vocational school students, one-quarter of whom reported few or no services available.

TABLE 7-3
POST-SECONDARY STUDENT RESPONSES TO THE QUESTION:
"COULD YOU OBTAIN THESE SERVICES IF YOU NEEDED THEM NOW?"
(Percentages)

| Responses | College | University | Technical Institute | Vocational School |
|---|---|---|---|---|
| Yes, all of them | 29 | 29 | 27 | 16 |
| Yes, most of them | 19 | 23 | 23 | 17 |
| Yes, some of them | 16 | 14 | 17 | 16 |
| Only a few of them | 7 | 6 | 7 | 14 |
| No, none of them | 3 | 3 | 3 | 10 |
| Don't know | 26 | 25 | 23 | 27 |
| Total | 100 | 100 | 100 | 100 |

Approximately one-quarter of students did not know what services were available to them. This is understandable considering that the respondents were first-time students who had not been enrolled at their institution for longer than one month. Yet, most first-time college students are interviewed prior to enrolment. This should present a good opportunity for new students to be advised of the various services.

While the provision of services required to cope with student concerns has been widely advocated, the majority of college and vocational school students see these as part of the overall community rather than as on-campus services (Table 7-4). This position was reversed for university students, with two-thirds preferring services on-campus. There appear to be two possible explanations for the rather

wide difference of opinion on this matter. First, over the years the universities have tended to provide many of the services mentioned. Second, due to the nature of the community college (a non-residential establishment) and the university (providing residential accommodation), a greater percentage of university students than college students live away from home, which contributes to developing the university into an autonomous community. In effect, rather than being part of a community, the university has grown to be a community in its own right.

TABLE 7-4
POST-SECONDARY STUDENT RESPONSES TO THE QUESTION:
"WHERE SHOULD SERVICES BE MADE AVAILABLE?"
(Percentages)

| Responses | College | University | Technical Institute | Vocational School |
|---|---|---|---|---|
| On campus | 43 | 68 | 54 | 25 |
| By arrangement with appropriate services within community | 45 | 23 | 36 | 60 |
| No special arrangements for students necessary | 12 | 9 | 10 | 15 |
| Total | 100 | 100 | 100 | 100 |

Many of the services that might relieve the concerns of students fall within the scope of general health services. But, if such services are to be provided through a campus related health facility, which one would appear to be most in demand? The questionnaire included options such as routine examinations, physical diagnosis, treatment for minor emergencies, family planning, dental care, psychiatric counselling, and group therapy.

While college and university health services may prefer to look upon themselves as something more than band-aid and aspirin dispensers, students value these services more than any other. Perhaps it is easier for students to visualize their own needs in this instance, as small accidents can overtake even those in the best of health and emergencies do require on-the-spot service. Over three-quarters of college students and a slightly greater percentage of university students anticipated that they would use such a service. While age and socio-economic status were not a factor in the anticipated utilization rate of university students, age did appear as a factor in the case of college students, with 60% of those under 20 prepared to use the service compared to only 46% of those over 25 years.

Both routine examinations and physical diagnostic services would appear to be worthwhile, although slightly over one-quarter of students were "undecided" on these. The large number of undecided students are perhaps waiting to see whether such a service proves useful to them or is generally accepted by their peers.

It might be suggested that the general lack of existing college health services may have accounted for the large proportion of undecided students; but at the universities, where health services have been in operation for many years, an even larger proportion of students was undecided. It must, however, be reiterated that the respondents were new to their institutions and therefore not fully aware of the services available.

## SUMMARY

This chapter summarized the results of a series of studies designed to identify the problem areas causing the most concern to community college students. In all, seven broad problem areas were investigated: physical illness, emotional and family problems, social relationships, financial, academic and career problems.

As was the case with many of the variables examined in this report, there was a wide range of responses both among community college students as a group and by comparison with students from other post-secondary institutions.

In general, financial concerns were uppermost in the mind of a substantial number of post-secondary students, with career and academic problems close behind. Variations were found to exist when responses were examined on the basis of age, sex, socio-economic status and program of study. On most issues the presence of student accommodation on campus appears to have a major influence on student concerns and expressions of need, as was clearly evident from the responses of university students.

The desirability of providing extensive health services in post-secondary institutions is open to question if the opinions of students on this issue are to be given credence. However, career and academic counselling are considered to be important by a relatively large number of students.

Chapter 8

# THE POTENTIAL COLLEGE POPULATION

This chapter is primarily concerned with an analysis of the major segment of the potential college student population — the graduating students in the secondary schools of British Columbia.

At the outset, it must be noted that 56% of first-year students enter the colleges directly from secondary school. The remaining 44% are adult students from a number of sources, including many sponsored by the federal Department of Manpower. By comparison, 85% of students entering first-year at the universities are directly from secondary school.

In view of this difference, it seemed important to examine the characteristics of secondary school graduates to determine, among other factors, the type of student who might be attracted to a community college. More specifically, are the colleges attracting a representative segment of secondary school graduates in terms of their socio-economic characteristics and academic background? A task of equal importance was to examine the intentions of these secondary school students as to their future educational plans. What role does the community college play in these plans? Of particular concern in this context is the effect of colleges upon students' educational plans in geographic areas which provide college access, as opposed to areas where there are no community colleges. Is the assumption that the presence of institutions of post-secondary education increases participation rates valid?

Such problems as enrolment predictions, attendance patterns, discrepancies between stated intentions and actual behaviour, and general priorities in choice of institution are of current concern to educational planners.

To shed light on these issues, a survey of Grade 12 students in the secondary schools of British Columbia was conducted. Data were collected by a questionnaire which examined basic characteristics (age, sex and secondary school program), socio-economic characteristics (parents' education, occupation and income), academic characteristics (grade average, rank in class) and intentions as far as further education beyond secondary school were concerned (choice of institution and reasons for choice).

Considerable thought was given to determining the optimal time for gathering these data. It was obvious that the survey must be given while students were still at secondary school but, at the same time, it should be presented close enough to graduation that the students' intentions were reasonably definite. The best time was deemed to be May.

The questionnaire was presented in the same month in two successive years: 1972 and 1973. The response rates were approximately the same in each year, around 72%, with about 19,500 of a maximum of 26,500 students responding. These students represented 140 of the 144 secondary schools in the province offering a Grade 12 program. The rate of response may actually have been slightly higher than indicated, since an undetermined number of students had left school or graduated after the first semester of the academic year.

The results of the two questionnaires were remarkably consistent. The data quoted in the remainder of this chapter are taken from the 1973 survey.

## A PROFILE OF THE GRADE 12 STUDENT

### Age, Sex and Academic Achievement

Females slightly outnumbered males at the Grade 12 level (51.4% to 48.6%), a statistic which must be noted when examining the sex breakdown of students entering colleges and universities. More than two-thirds of the students were enrolled in the academic or university preparatory program in the secondary schools. In terms of age, virtually all (91%) were in the 18-19 age bracket.

Students were asked to indicate their approximate overall grade average and their rank in class in relation to other students. While the grade averages were distributed in a realistic way, "A" (4%), "B" (22%), "C+" (38%), "C" (30%), "P" (6%), and "F" (0%), the indicated ranks were somewhat high, with 68% of students ranking themselves in the middle third of their class, 26% in the upper third, and only 6% in the lower third. It might be interesting to comment on these two statistics. Regarding the first, grade averages are generally known to students by May and might be considered as objective data. On the other hand, rank in class is not usually supplied to students and must be assumed by them in order to respond to the question. In this sense, rank in class is a subjective statistic. Obviously, students are reluctant to rate themselves as being in the lower third of their class.

An analysis of data was conducted to determine whether a difference existed between male and female students in their academic averages in Grade 12. The data show that female students tend to gain higher grade averages than their male counterparts. This is shown in Table 8-1.

Of particular note in this regard are the "B" and "F" grade categories. It is interesting to observe that the data are in accord with several other studies which concluded that female students gain higher grades in school than their male counterparts. The reasons for this phenomenon are open to conjecture.

TABLE 8-1
BREAKDOWN OF GRADE 12 STUDENT ACHIEVEMENT BY SEX
(Percentages)

| Sex | Grade Average | | | | | | All Grade 12 Students |
|---|---|---|---|---|---|---|---|
| | A | B | C+ | C | P | F | |
| Male | 46 | 39 | 45 | 56 | 69 | 75 | 49 |
| Female | 54 | 61 | 55 | 44 | 31 | 25 | 51 |

## Socio-Economic Background

The major parameters of socio-economic classification, parent's occupation, parent's education, and family finances, were obtained from the Grade 12 students and were discussed in Chapter 5. The results showed that high school graduates, as a group, represent a selective sample of the population at large.

An attempt was made to determine whether any relationship existed between the occupation of a student's father and his expected grade average. In the case of students whose fathers fell into the "professional" category, more "A" averages were found than in other occupations. Whereas 10% of all fathers fell into the "professional" category, 19% of the "A" grades and 14% of the "B" grades were obtained by students who had fathers in this category. These results are summarized in Table 8-2.

TABLE 8-2
DISTRIBUTION OF FATHERS IN SELECTED OCCUPATIONAL CATEGORIES ACCORDING TO GRADE 12 STUDENT ACHIEVEMENT
(Percentages)[1]

| Grade Average | Occupation of Fathers | | | | |
|---|---|---|---|---|---|
| | Professional | Managerial | Skilled Worker | Semi-Skilled Worker | Unskilled Worker |
| A | 19 | 22 | 14 | 6 | 3 |
| B | 14 | 21 | 17 | 7 | 4 |
| C+ | 10 | 21 | 20 | 7 | 4 |
| C | 7 | 20 | 19 | 7 | 4 |
| P | 8 | 18 | 18 | 8 | 5 |
| F | 7 | 17 | 19 | 10 | 8 |
| All Grade 12 students | 10 | 20 | 18 | 7 | 4 |

1. Percentages for each grade average do not total to 100 since only selected occupational categories are shown.

A similar relationship was found to exist between father's education and grade average. Whereas 13% of all students' fathers had earned a Bachelor's degree or higher, 26% of the "A" average students had fathers whose education fell into that category. Conversely, whereas 18% of students noted that their fathers had reached an educational level of "Less than Grade 8," 40% of the "F" grades were in that category. It is clear that a strong relationship exists between father's education and achievement in secondary school. These results are summarized in Table 8-3.

## Plans for Further Education

In the entire population of Grade 12 students surveyed in the study, only 10% were definite in the opinion that they would *not* continue their education beyond secondary school. However, only 40% stated that they would continue in the *coming fall*. The remainder noted their intention of taking one or more years away from formal education before continuing.

Of those students who indicated that their plans were to continue their education, approximately one-quarter chose the university, one-quarter a community

TABLE 8-3
SELECTED EDUCATIONAL LEVELS OF FATHERS ACCORDING TO GRADE 12 STUDENT ACHIEVEMENT
(Percentages)[1]

| Grade Average | Father's Education | |
|---|---|---|
| | Less Than Grade 8 | University Degree |
| A | 15 | 26 |
| B | 15 | 18 |
| C+ | 17 | 12 |
| C | 19 | 10 |
| P | 25 | 10 |
| F | 40 | 9 |
| All Grade 12 students | 18 | 13 |

1. Percentages for each grade average do not total to 100 since only selected educational categories are shown.

college and 15% a vocational school. The remainder were distributed among several alternatives. Analyses presented later in the chapter show a breakdown of preferences on a regional basis. In response to a question concerning the importance of various factors in their selection of a post-secondary institution, students indicated that an institution's programs and geographic location were by far the most important.

In another question, students who were in some doubt about whether to continue their education were asked to indicate what factors would be most likely to influence them to continue. The most important factor was the availability of programs which would qualify them for a specific job. In effect, their first concern was utilitarian, although the program was perceived as a necessary experience.

When asked to indicate the source of the funds needed to continue their education, the most common response was a part-time job, followed in order by personal savings and parental help. Loans, scholarships and bursaries were noted by less than 5% of the students.

As might have been expected, students' expectations as to the highest level of education they hoped to obtain were very much related to their achievement in secondary school. This relationship is examined in Table 8-4 and shows the percentage of students with various grade averages who indicated that their highest

TABLE 8-4
STUDENTS WITH VARIOUS GRADE 12 ACHIEVEMENTS EXPECTING TO EARN A BACHELOR'S DEGREE OR HIGHER
(Percentages)

| Grade Average | Expectation of Bachelor's Degree or Higher |
|---|---|
| A | 79 |
| B | 57 |
| C+ | 36 |
| C | 21 |
| P | 12 |
| F | 22 |

educational aspiration was a Bachelor's degree or higher (professional degree, Master's, Doctorate). The table shows an obvious increase in the percentage of students aspiring to the higher levels of education as their grade average increases.

A similar pattern was found to exist (Table 8-5) in an analysis of the relationship between grade average and the time of the decision to continue education beyond secondary school. Of the students still undecided in Grade 12, only 17% were "A" students compared to 37% of "P" students. On the other hand, 19% of the "A" students claimed to have made a decision while in Grade 7 or earlier, while only 5% of the "P" students had done so. As stated in Chapter 5, studies conducted in the United States indicate that time of decision is an important factor in determining whether or not the student will continue his education beyond high school.

TABLE 8-5
TIME OF DECISION TO CONTINUE EDUCATION BEYOND SECONDARY SCHOOL ACCORDING TO GRADE 12 STUDENT ACHIEVEMENT
(Percentages)

| Grade Average | Time of Decision | | | | | |
|---|---|---|---|---|---|---|
| | Grade 7 | Grade 8-11 | Grade 12 | Undecided | Do Not Know | Total |
| A | 19 | 33 | 25 | 17 | 6 | 100 |
| B | 11 | 38 | 27 | 19 | 5 | 100 |
| C+ | 7 | 36 | 27 | 25 | 5 | 100 |
| C | 5 | 34 | 25 | 29 | 7 | 100 |
| P | 5 | 27 | 23 | 37 | 8 | 100 |
| F | 11 | 22 | 20 | 29 | 18 | 100 |

Students' post-secondary educational plans were examined on the basis of their stated average in Grade 12. The data in Table 8-6 indicate that a clear relationship exists between these factors. Apparently, high achievers are more firm in their intention to continue their education immediately. On the other hand, the decision *not* to continue is inversely related to academic achievement.

TABLE 8-6
FUTURE EDUCATIONAL INTENTIONS OF STUDENTS ACCORDING TO GRADE 12 STUDENT ACHIEVEMENT
(Percentages)

| Grade Average | Future Educational Intentions | | | |
|---|---|---|---|---|
| | Continuing Immediately | May Continue | Will Not Continue | Total |
| A | 71 | 25 | 4 | 100 |
| B | 57 | 37 | 6 | 100 |
| C+ | 41 | 50 | 9 | 100 |
| C | 30 | 48 | 12 | 100 |
| P | 23 | 62 | 15 | 100 |
| F | 26 | 48 | 26 | 100 |

Students' responses to a question regarding their sources of funds while continuing education were compared to their families' financial status. Not unexpectedly, a higher percentage of students from families with incomes above average indicated that their major source of funds would be their parents. Conversely, the percentage of students who indicated that they would seek loans to continue their education tended to increase as their families' financial status declined. These results are summarized in Table 8-7.

TABLE 8-7
SOURCES OF POST-SECONDARY EDUCATIONAL FUNDS
BY STUDENTS' FINANCIAL STATUS
(Percentages)

| Financial Status | Source of Funds | |
|---|---|---|
| | Parents | Loans |
| Considerably above average | 46 | 2 |
| Somewhat above average | 35 | 4 |
| Average ($10,000/year) | 24 | 6 |
| Somewhat below average | 17 | 10 |
| Considerably below average | 9 | 15 |

## The Non-Continuing Student

Of particular interest to those investigating enrolment patterns in community colleges are those students who, although completing secondary school, express no intention of continuing their education. There has been considerable conjecture in the literature of higher education as to the reasons why certain students do not continue. Some writers have suggested financial barriers, others geographic, while still more have concluded that socio-economic factors contribute to the decision made by students not to pursue further education. Whatever the cause, the data gathered in this study allows for analysis of this particular group of students while in their final year at secondary school.

In British Columbia only 10% of the Grade 12 students studied indicated that they had definitely no intention of continuing their education beyond secondary school. This group did not include those still "undecided." The students who indicated "no intention" of continuing were analyzed according to several characteristics and compared to the total population of students to determine how the "non-continuing" group differed.

Some fundamental differences between the two groups were identifiable, and these are summarized in Table 8-8. Cases where apparent differences were not significant are indicated. Some interesting observations can be made. Despite a slight majority of females in Grade 12, the percentage of their sex not continuing is remarkably high. In terms of academic achievement, the non-continuing students are generally below the general population, particularly among "A" and "B" achievers.

Students in the "non-continuing" group are also lower than the general student population in terms of a number of socio-economic criteria. They perceived their family financial status to be somewhat lower than average, and the proportion of fathers in occupational categories such as "managerial" and "professional" was

lower than for the total student population. The same pattern may be observed also in relation to father's and mother's education. This is particularly apparent when the percentages of parents with university degrees are compared. Differences between the "non-continuing" students and the total student population were observed also with respect to their expected areas of life satisfaction.

**TABLE 8-8**
**SELECTED CHARACTERISTICS OF GRADE 12 STUDENTS INDICATING "NO INTENTION" OF CONTINUING THEIR EDUCATION BEYOND SECONDARY SCHOOL COMPARED[1] WITH ALL GRADE 12 STUDENTS**
**(Percentages)**

| Selected Characteristics | Non-Continuing Students | All Students |
|---|---|---|
| SEX | | |
| Males | 32 | 49 |
| Females | 68 | 51 |
| ACADEMIC AVERAGE | | |
| A | 2 | 4 |
| B | 14 | 22 |
| C+ | 36* | 38* |
| C | 37 | 30 |
| P | 10 | 6 |
| F | 1 | 0 |
| FAMILY'S FINANCIAL STATUS | | |
| Considerably above average | 5 | 7 |
| Somewhat above average | 29 | 35 |
| Average ($10,000/year) | 51 | 44 |
| Somewhat below average | 11* | 11* |
| Considerably below average | 4 | 3 |
| FATHER'S OCCUPATION[2] | | |
| Managerial | 15 | 20 |
| Professional | 3 | 10 |
| Skilled worker | 21 | 18 |
| Semi-skilled worker | 8 | 7 |
| Unskilled worker | 5 | 4 |
| FATHER'S EDUCATION | | |
| Less than Grade 8 | 27 | 18 |
| University degree | 4 | 13 |
| Other | 69* | 69* |
| MOTHER'S EDUCATION | | |
| Less than Grade 8 | 18 | 12 |
| University degree | 2 | 7 |
| Other | 80* | 81* |
| EXPECTED SATISFACTION IN LIFE[3] | | |
| Career, occupation | 20 | 25 |
| Professional or intellectual activities | 2 | 12 |
| Making money | 24 | 18 |
| Marriage and family | 46 | 31 |
| Leisure time, sports | 19 | 26 |
| Religious beliefs and activities | 6 | 5 |
| Improving life for others | 5 | 11 |
| Literature, art, music | 4 | 10 |
| Politics, community activities | 1 | 2 |
| Not listed | 15 | 11 |

1. All differences are significant at the 1% level except those marked by an asterisk(*).
2. Percentages do not total to 100 since only selected categories are listed.
3. Percentages do not total to 100 since students were allowed to mark up to two response options.

In an attempt to further quantify differences between continuing and non-continuing students, some discriminant analysis was carried out. A moderately useful discriminant function was obtained which could correctly classify 65% of a random group of students containing equal numbers of continuers and non-continuers into their respective groups:

$$D = 5.59 - 1.07(S) - .71(G) - .41(F) - .15(T)$$

where D = score: $D > 0$ for continuing students and $D < 0$ for non-continuing students;
S = sex: male = 1, female = 2;
G = grade average: A = 1, B = 2, C+ = 3, C = 4, P = 5, F = 6;
F = family's financial position: considerably above average = 1, somewhat above average = 2, average = 3, somewhat below average = 4, considerably below average = 5;
T = time of decision concerning further educational plans: Grade 7 or earlier = 1, Grade 8-10 = 2, Grade 11 = 3, Grade 12 = 4, still undecided = 5.

From the above function, it is clear that sex is the most important single variable in distinguishing between students who intend to continue their education and those who don't, with males more likely to continue than females. This is followed by grade average, family's financial status and time of decision concerning further educational plans: the lower the first two and the later the last, the less likely is a student to be planning to continue his education beyond secondary school.

## PARTICIPATION RATES AT THE POST-SECONDARY INSTITUTIONS

Students planning to continue their education beyond secondary school were asked to indicate the type of institution which they planned to attend. The results of this question are summarized in Table 8-9.

TABLE 8-9
POST-SECONDARY INSTITUTIONS SELECTED AS FIRST CHOICE BY GRADE 12 STUDENTS
(Percentages)

| Post-Secondary Institution | First Choice |
|---|---|
| Business school | 4 |
| Vocational, art school | 14 |
| Technical institute | 11 |
| Community college (university transfer) | 10 |
| Community college (career program) | 9 |
| Community college (vocational, art program) | 4 |
| University | 26 |
| Other plans | 9 |
| Undecided | 13 |
| Total | 100 |

In May 1974, a report was published by the British Columbia Post-Secondary Education Enrolment Forecasting Committee[1] based on data from the *Impact Study* survey of Grade 12 students in April 1972 and the survey of students entering post-secondary education in September 1972. It attempted to evaluate the predictive value of the Grade 12 questionnaire in determining enrolments in post-secondary institutions. The results are summarized in Figure 8-1. The regions used in the figure cover the entire province and are based upon the areas which supported community colleges at the time of the study together with their areas of potential expansion. The regions are composed of combinations of school districts which form suitable geographic areas for educational purposes.

Approximately 26% of the Grade 12 students continued directly to post-secondary education in B.C. in the fall of 1972. This percentage does not include students entering vocational, business and art schools. Figure 8-1 indicates that there was considerable regional variation throughout the province. One reason for this variation in participation rates is the availability of educational institutions in the various regions. Generally, a higher participation rate is found in regions which have a community college. These results are summarized in Table 8-10 in which regions marked by an asterisk (*) are those which provide community college education.

**TABLE 8-10**

**PARTICIPATION RATES BY REGION OF GRADE 12 STUDENTS ENTERING POST-SECONDARY EDUCATION BY INSTITUTION AND PROGRAM[1]**

**(Percentages)**

| Region[2] | University | College Academic Transfer | Technical Institute | College Career/Technical | Total |
|---|---|---|---|---|---|
| Capilano* | 20 | 13 | 3 | 3 | 39 |
| Vancouver* | 19 | 12 | 3 | 2 | 36 |
| Camosun* | 22 | 3 | 2 | 2 | 29 |
| Selkirk* | 11 | 11 | 3 | 3 | 28 |
| Okanagan* | 12 | 10 | 3 | 2 | 27 |
| Malaspina* | 10 | 9 | 3 | 6 | 28 |
| Douglas* | 12 | 7 | 3 | 2 | 24 |
| Cariboo* | 7 | 8 | 2 | 3 | 20 |
| Fraser Valley East | 11 | 5 | 3 | 1 | 20 |
| North Van. Island | 13 | 3 | 1 | 2 | 19 |
| New Caledonia* | 7 | 7 | 1 | 1 | 16 |
| East Kootenays | 14 | 1 | 1 | 0 | 16 |
| North Country | 11 | 2 | 1 | 0 | 14 |
| All of B.C. | 14 | 8 | 3 | 2 | 26 |

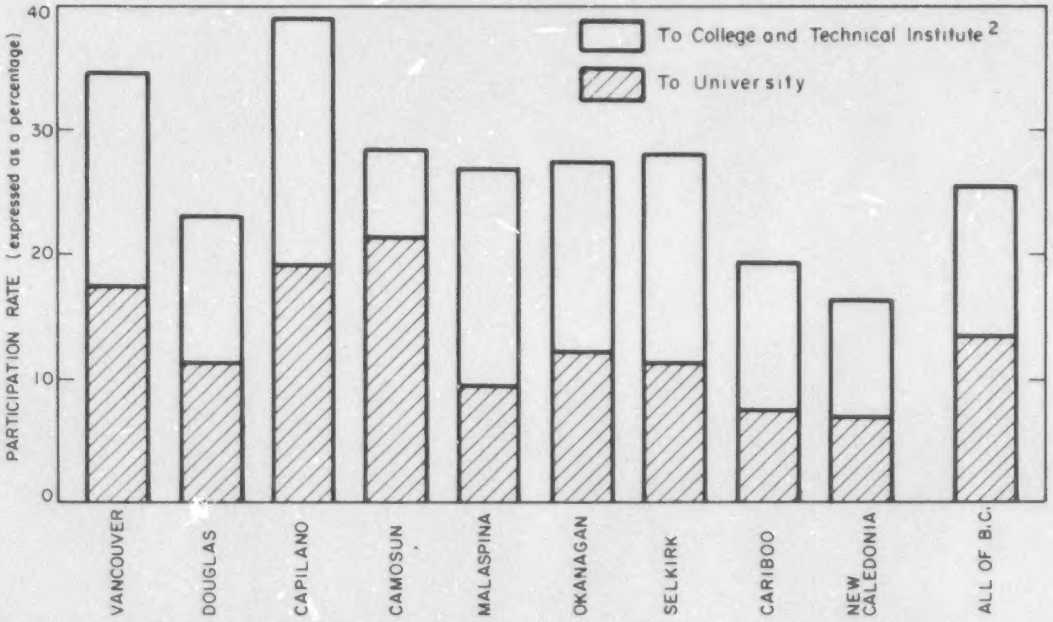
1. Calculated from: B.C. Post-Secondary Education Enrolment Forecasting Committee Report No. 12, May 1974.
2. Regions providing community college education are marked by an asterisk (*).

The B.C. Forecasting Committee study explored participation rates on the basis of a number of socio-demographic factors. There was substantial variation in

1. W. Garnett Picot, *Participation by Grade 12 Students in the B.C. Post-Secondary System*, British Columbia Post-Secondary Education Enrolments Forecasting Committee, Report #12, Vancouver, B.C., May 1974.

Figure 8-1

PROPORTION[1] OF GRADE 12 STUDENTS CONTINUING DIRECTLY TO UNIVERSITY, COLLEGE OR TECHNICAL INSTITUTE




1. Based on B.C. Post-Secondary Education Enrolment Forecasting Committee, Report #12, May 1974
2. Excluding Vocational Programs

the participation of Grade 12 students in post-secondary education on the basis of father's education. Participation rates ranged from a low of 16% in the case of students where father had less than Grade 8 education, to 56% in the case of students whose fathers were university graduates. These results are summarized in Table 8-11.

TABLE 8-11
PARTICIPATION RATE OF GRADE 12 STUDENTS ENTERING POST-SECONDARY EDUCATION ACCORDING TO FATHER'S EDUCATION[1]
(Percentages)

| Father's Education | Participation Rate |
|---|---|
| Less than Grade 8 | 16 |
| 1-2 yr. secondary | 19 |
| 3-5 yr. secondary | 27 |
| Trade/vocational | 25 |
| Some university | 34 |
| University grad. | 56 |
| Don't know | 20 |
| Provincial total | 26 |

1. From: B.C. Post-Secondary Education Enrolment Forecasting Committee. Report No. 12. May 1974.

The results show a strong relationship between the fathers' education and participation rates in post-secondary education. The high participation rate of students where fathers have a university degree is particularly noteworthy.

A similar analysis, based on father's occupation, again showed a variation in participation rate. The results are summarized in Table 8-12. Again the *key* categories of "professional" and "managerial," so often referred to in the literature, proved to be major factors in relation to participation rates. The 50% participation rate of students whose fathers were in a "professional" occupation is indeed remarkable and has implications in the counselling of students regarding their

TABLE 8-12
PARTICIPATION RATE OF GRADE 12 STUDENTS ENTERING COLLEGE OR UNIVERSITY ACCORDING TO FATHER'S OCCUPATION[1]
(Percentages)

| Father's Occupation | Participation Rate | | | |
|---|---|---|---|---|
| | University | College Academic Transfer | College Tech.[2] | Total |
| Professional | 33 | 12 | 5 | 50 |
| Managerial | 19 | 9 | 5 | 33 |
| Sales/clerical | 14 | 9 | 4 | 27 |
| Transport/skilled | 9 | 6 | 4 | 19 |
| Mining/logging | 7 | 4 | 4 | 15 |
| Semi-skilled/unskilled | 9 | 7 | 6 | 22 |
| Retired/deceased | 11 | 6 | 4 | 21 |
| No response | 15 | 7 | 7 | 29 |
| All occupations | 14 | 8 | 5 | 27 |

1. From: B.C. Post-Secondary Education Enrolment Forecasting Committee. Report No. 12. May 1974.
2. Including career/technical programs plus the technical institute.

future education. The relatively small percentage of students with fathers in the semi-skilled, skilled, and logging/fishing categories is also worth noting. However, it must be remembered that these figures do not include students entering vocational schools.

Analysis based on students' sex indicated that 29% of males continue to college or university from Grade 12, while the corresponding percentage for females was 24%, despite the slightly higher percentage of females than males in Grade 12.

When participation rates were analyzed on the basis of family income, few differences were observed; however, it must be remembered that the majority of students (45%) indicated that their family income was "average." There remains some question as to the relative accuracy by which a student perceives the term "average." Quite possibly, it will cover a considerable range in family income although in the questionnaire approximately $10,000 per year was suggested as being an "average" income for 1972.

Of the four socio-economic factors examined in the Forecasting Committee report (sex, father's education, father's occupation, perceived family income), father's education was found to have the greatest effect on participation rates. Of the total variance, 33% was accounted for by father's education, 15% by father's occupation, 3% by student's sex and virtually none from perceived family income. The remaining 49% of the variance could not be explained, but other socio-demographic factors, including mother's education and occupation, could be additional predictors.

A further study by the Forecasting Committee compared the stated educational intention of Grade 12 students with post-secondary attendance patterns. Again, it must be remembered that the study dealt only with students entering the universities and the colleges, and excluded those enrolling in business, vocational, and art schools. In addition, the data were used to produce aggregate totals only and not patterns of individual students.

The comparison showed that 28% of the 1971-72 Grade 12 students indicated that they intended to enter a university or college in September 1972 and 26% actually did continue. Of these students, 12% chose a college as their first choice and 12% actually registered. Another 16% planned to enrol at university and 14% actually did. These results are summarized in Table 8-13. The deviation between indicated and actual attendance did not differ significantly among socio-economic groups.

TABLE 8-13

STATED FIRST PREFERENCE OF GRADE 12 STUDENTS AND SUBSEQUENT ACTUAL PARTICIPATION IN POST-SECONDARY INSTITUTIONS, 1972-73

(Percentages)

| Institution | Stated First Preference | Actual Participation |
|---|---|---|
| College | 12 | 12 |
| University | 16 | 14 |
| Total | 28 | 26 |

One further procedure utilized in the *Impact Study* deserves comment. The questionnaire responses recorded by students, while in Grade 12, were matched

with the surveys completed by the *same* students, when they eventually enrolled in post-secondary institutions. In essence, a "matched file" was created, involving 2,250 students for whom it was possible to match the two surveys.

The advantages of this procedure was that *individual* students were studied, rather than simply aggregate totals. The results showed that, of the students entering the community colleges in September, 1972, 60% had indicated in Grade 12 that the college was then their first choice, while a further 15% had given a university as the first choice. Another 20% had indicated that the college was either a second or third choice.

As a matter of comparison, 85% of students entering the universities had indicated that as their first choice in Grade 12, with another 15% indicating that university was a second or third choice. Results similar to that for university students were obtained from students entering the technical institute.

All these results give strong support to the view that students' decisions regarding choice of post-secondary institutions are clearly established prior to completing high school. Hence a Grade 12 survey can be a useful predictor of enrolment patterns. However, of the students entering colleges for the first time, only about 56% come directly from Grade 12. Predictions concerning the remainder are obviously more difficult to make.

## SUMMARY

This chapter has focused upon secondary school students completing Grade 12. This group is the largest single source of post-secondary students. Of all students entering the community colleges for the first time, 56% are direct entries from the secondary system.

Based upon data gathered from these students while enrolled in Grade 12, a profile was prepared. Parameters which were examined included age, sex, academic background, socio-economic status and plans for further education. Interrelationships between these variables were also examined and a number of factors which could be utilized in predicting enrolment in post-secondary institutions were identified.

An analysis of the characteristics of secondary school students who had expressed "no intention" of continuing their education was also conducted, and fundamental differences were found to exist between them and the general student population.

Finally, a follow-up study of Grade 12 students allowed their stated intentions and their actual behaviour as regards further education to be compared. In addition, factors involved in student participation rates were explored, together with variations in participation rates on a regional basis.

Chapter 9

# THE COLLEGE STUDENT AFTER COLLEGE

Growth in the British Columbia college movement has been so rapid that there has scarcely been time to develop a clear picture of the college and its relationship to the post-college years of work and study. The first public community college in the province opened its doors in 1965 with an enrolment of some 3,000 students. Nearly a decade later, nine public colleges were preparing students to enter various fields of employment or to transfer to a university.

The record of college students after transfer to employment or university is generally commendable. However, with the increasing acceptance of students into an "open door" community college have come questions concerning the quality of the college product, that is, the student. In general, two types of problem have emerged: 1) those centered around the planning of college curricula which will permit students to transfer to university; 2) those existing with respect to standards in the various colleges and the acceptance of credits by employers and universities.

Considerable time and effort has been expended on the study of college students who transfer to university. Of equal, if not greater importance in view of the larger numbers involved, are the students who complete career/technical and vocational programs at college.

During the 1973-74 academic year, some 22,000 full-time and part-time students were enrolled in the province's public colleges. Approximately 70% of these students were in academic transfer programs. Yet, only 1,300 (8.5%) transferred to a provincial university for the start of the 1974-75 academic year.

On a provincial basis, nearly one-third of the students registered in programs other than academic transfer. These are generally referred to as "career" program students. While no accurate figures were available on a provincial basis, data on graduates from career programs in the 1973 and 1974 academic years at one urban college indicate that graduation rates for career program students were about 92% of those enrolling. The remaining 8% either withdrew (2%), failed (1%), or did not re-enrol (5%).

In the academic transfer programs the attrition rate has been under 10% of student enrolment. However, students who completed a particular term or semester but who did not re-register in a subsequent semester to complete two full years of college education were not included in this figure. While considerable research has been done concerning students who withdrew from college prior to completing their programs, one important area of study has often been over-looked. That area

of concern is the college "graduate", who eventually enters the employment field or who transfers to university. Information about these transfer students is essential for the effective operation of curriculum planning groups, advisory boards, academic councils, and other committees concerned with the development of community colleges.

In this chapter, the results of studies on two groups of college students will be presented: the career program graduate, and the academic transfer student transferring to university.

## TRANSFER TO EMPLOYMENT

Formal studies of college graduates from career/technical and vocational programs have been minimal in British Columbia. The difficulty of systematically identifying graduates from the many college programs has been a problem, but more important has been the difficulty of locating students after they leave college.

A study was carried out which, in order to minimize these two problems, was confined to graduates from a single institution, Vancouver Community College. At this college a start had been made on computerizing student records, thereby facilitating graduate student identification. It was also believed that in a large urban area fewer students would change their address after graduation than in smaller centers. As it turned out, Post Office returns of undeliverable letters amounted to 15% of the sample.

Over a twelve-month period, 2,500 graduates completed career/technical or vocational programs. The length of study involved in the various programs ranged from four months to two years, with the majority of programs being no longer than ten months. The results described in this chapter are based on the responses of 800 graduates from the 1974 programs.

### The Study

The study of students who transferred to employment was *not* province-wide for the reasons previously mentioned. Within the college used for the study, data were collected for graduates from all programs in the Technical, Service, Business and Health divisions, and from all career/technical programs (generally of two years' duration) in Art and Applied Arts, Business Administration, and Community Services departments.

Over the two-year study period (1972-1974), contact attempts were carried out four months after graduation by means of a mailed questionnaire. Returns ranged from a low of 22% from the Service Division to a high of 48% for the Art and Applied Arts Department.

The objectives of the study were three-fold: 1) to determine what college graduates were doing four months after graduation; 2) to determine if the college had provided curricula relevant to the needs of students and to the requirements of employers; 3) to determine if the college had provided the necessary personnel to make the educational experience adequate and effective.

### Employment of Graduates

Three of four graduates who responded were employed full-time within four months of leaving the college, and one in ten was unemployed but actively seeking

full-time employment. The remaining students were either employed on a part-time basis, travelling, or unemployed and not actively seeking work. While graduates from the Business Administration programs experienced the fewest problems in finding employment, nearly one in five Art graduates were unemployed and seeking work at the time of the survey.

Vocational program graduates required the least time to secure employment, with one-half having accepted a job prior to leaving college. On the other hand, only one-third of career/technical program students had secured a job prior to graduation. Although these students took longer to find employment, the vast majority were employed within three months of graduation. There was some evidence from students' comments that career/technical program graduates were somewhat more selective about jobs, on occasion refusing an offer because it was out of town, or not exactly what they had in mind.

Six of ten graduates were employed in areas that they felt were directly related to their study at college. A further two of ten reported "some" relationship between college study and their employment.

Vocational program graduates entered employment in jobs categorized as "professional and technical" (17%), "service and recreation" (21%), "clerical" (22%), and "craftsman" (34%). Career/technical program graduates tended to enter "professional and technical" employment (35%) and "clerical" employment (24%).

College education for students who completed career programs may well have assisted many students in finding employment in occupations considered more prestigious. That is, while 17% of the work force employed in the Vancouver area were in "managerial, professional and technical" occupations (1971 Canadian Census), over twice that percentage (40%) of college career graduates found such employment. In the case of vocational graduates, a greater proportion entered occupations classified as "service" (21%) and "craftsmen" (34%) than is found in the population at large (12% and 19% respectively).

There was a tendency for some graduates to enter employment at a starting salary above "average income." This was particularly so in vocational programs in the Business and Health areas and in the career/technical programs of the Community Service Department. In these cases the vast majority of graduates were female, with at least three-quarters reporting a starting salary higher than the average female income of $3,350 per year as reported in the Census data. A similar situation was evident for the predominantly male programs found in the Technical Division and the Business Administration Department, where the average male salary of $7,450 per year was exceeded as a starting salary by at least two-thirds of the former students. There was an overall tendency for the Technical Division graduates (including the automotive trade, building construction, drafting, electronics and marine service) to earn higher starting salaries after completing training programs lasting one year or less than was the case for graduates from other divisions, some of which offer programs up to two academic years in length. For example, 42% of graduates from the Technical Division (programs of less than one year) reported starting salaries in excess of $7,200 per year. This was double the percentage reporting such earnings from two-year programs.

There is, therefore, evidence that college graduates benefit financially from their college education, but benefits are not directly related to the length of time spent at college.

## College Employment Relationship

Judgments as to the relevance of college curricula to the jobs of particular graduates are difficult to make. It may be argued that although it was not a requirement that an individual applicant be a college graduate, the training and education provided by the college enabled the student to qualify. It is possible that the knowledge and skills required for a specific position could be obtained in other ways than from formal college education, but many individuals elect the community college route to employment.

Two out of three graduates reported that being a college graduate was not a requirement for their job. In fact, depending on the division concerned, from 76% to 82% of employers did not ask for proof of a college education, from 60% to 70% did not ask about college achievement, and 80% did not ask for college references. A possible explanation of what might seem to be indifference by employers on these points is that the ability to perform specific tasks is more important than a particular college credential.

A further explanation may be the fact that only half of the graduates employed were engaged in work directly related to their college studies. A further third found employment in work at least partially related to their college programs. In spite of the problem of establishing a direct relationship between work and college study, 70% of graduates were satisfied with their college education and a further 20% were at least partly satisfied.

In relation to their fellow employees, college graduates believed themselves to be at least equally competent. In fact, one-fifth of the college alumni were of the opinion that their level of competence was "superior."

In British Columbia considerable emphasis has been placed on the use of advisory committees from the community to give direction to the development of college programs and curricula to meet specific needs. The success of this procedure may be partially measured by the fact that over half of former students indicated that their particular college program definitely met their employer's requirements. While this figure may not, at first, appear to be overly impressive, it becomes more significant in view of the fact that nearly all of these responses were from persons who had gained employment in work related directly to college study. With the exception of Art students, where no more than one-third indicated that the college program met employer requirements, it is evident that the college had developed curricula relevant to the needs of both students and employers.

## Adequate and Effective Education

At the time of study, two-thirds of college graduates indicated a desire to enrol for further educational training at a later date, the proportion being greater among former career/technical program students than former vocational students. The vast majority of students indicating intentions to continue their education would do so at a local university on a part-time basis (less than one-fifth would return on a full-time basis), within two years of graduation from college. One-third of the graduates would return to the college for further study.

While former students reported general satisfaction with their college experience, they did not hesitate to indicate problem areas which the college could improve. For the most part, criticism was directed toward curricula. While such cri-

ticism was minimal, there was evidence that students entering certain programs had not made themselves aware of the direction of the program, its content, and the standard of performance expected by the college.

The success of college programs may, to some extent, be measured in terms of the students who would take the same pattern of courses if they had to do it over again, and recommend the same program to friends. Two-thirds of former students indicated that they would take a similar pattern of courses again if they were to enrol at the college for the first time, and almost 80% would recommend the same program to friends.

### Synopsis

Two main problem areas concerning the employment of college graduates were identified in this study.

1) In a number of cases it would appear that career education and training precedes the actual choice of a specific career. Where the career choice had been made prior to enrolment in a specific program, the impact of the college on the student was very positive — the student was satisfied and confident about his occupation and evidenced feelings of high regard for the college experience. On the other hand, where no clear career choice had been made, or where students were "experimenting" with particular career choices, dissatisfaction was more prevalent. If, however, such experimentation is considered to be a legitimate function of colleges, then any failures or dissatisfactions expressed by students are actually directed at a specific career rather than at the college concept.

2) A major criticism from students who considered themselves to be successful and satisfied with their jobs was the lack of recognition demonstrated by some employers toward their skills and abilities as college graduates. This was particularly true for graduates employed in the business and service areas. There appears to be a need, particularly on the part of the instructors, to demonstrate to the business community that careers in their specialities are important and worthwhile. They must demonstrate not only their competence, but also their pride as professionals in their areas of expertise.

## TRANSFER TO UNIVERSITY

A prominent trend in British Columbia post-secondary education during the past several years has been the increase in the number and percentage of students who begin their baccalaureate degree programs in the comprehensive community college. In all likelihood this trend will become more pronounced in future. There are those within the province who are already predicting that within the next few decades all first and second year university level courses leading to the baccalaureate degree will be given in community colleges, thereby freeing the universities to concentrate on the last two years of undergraduate and graduate education.

The first group of college to university transfer students, comprising 176 individuals, entered the University of British Columbia in September 1966, one academic year after the opening of the province's first community college. One year later the number of students transferring from college to university was doubled. As new colleges were opened and classes in existing colleges grew, so did

the numbers of students using the college as an introduction to university study. By September of 1971, over 800 college students had transferred to U.B.C. and the upward trend continued in 1972 and 1973. During these two years, one-fifth of new enrolments at the University was composed of students who transferred from a provincial public two-year college. In the 1973-74 academic year, 1,100 community college students were among the 5,300 students enrolling at U.B.C. for the first time.

A major portion of the province's transfer students are from the multi-campus complex of Vancouver Community College (V.C.C.). In fact, one-half of the college students who transfer each year to the University of British Columbia, transfer from the V.C.C. campuses. Since this college is much larger than the other eight colleges in the province (with some 3,500 academic transfer students enrolled in the fall and spring terms) and since it has been in operation longer, it was possible to carry out various studies involving students from this college that could not be done to the same extent at the other colleges.

The actual impact of the community college movement on university enrolment has yet to be fully assessed. The colleges are providing an opportunity for many students to continue with a university education. Approximately 50% of these students would not be able to enter university due to low secondary school achievement, were it not for the second opportunity provided by the colleges. As has been pointed out, the number of students entering university from college has been steadily increasing. It had been speculated that the development of colleges would relieve enrolment pressures on the universities. However, there are indications that offering the first two years of baccalaureate degrees at community colleges will actually provide more students, especially those who may be termed "late starters," with the opportunity to enter university eventually.

## The Study

The majority of studies about students transferring from community colleges to universities have involved no more than routine computation of grade-point averages or university standings in the first term or academic year after transfer, and their comparison with the averages earned in college. The "Articulation Study" segment of the *Impact Study* differed somewhat in approach from previous investigations. In addition to the traditional recording of achievement after transfer, a more longitudinal approach was followed. An attempt was made to develop procedures for studying the university achievement of transfer students in terms of their previous achievement at college and in secondary school.

The "Articulation Study" involved an appraisal of the performance of transfer students enrolled at the University of British Columbia over a period of two academic years, 1972 to 1974, as well as a more detailed analysis of factors that might be significant in explaining variations in performance.[1] Students from all provincial colleges, both public and private, were included in the study. In both years about 2,400 transfer students were enrolled at the University of British Columbia. Of these, 1,000 were enrolled for the first time, the remaining 1,400 having transferred previously.

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1. There are four major universities in the province. U.B.C. was selected for follow-up performance for two reasons: 1) the authors had conducted research studies of students at this university prior to the *Impact Study* and had a well established data base and line of communication with the university, and 2) the number of transfer students to this university is five times that of the combined total for the remaining three universities.

The April sessional examination results of transfer students were categorized and analyzed by individual colleges as well as for the province as a whole. In addition, summary data were acquired about student performance by faculty, department and course. Separate performance data were also obtained for "direct entry" students, that is, for those who entered the university *directly* from secondary school. It was then possible to make comparative evaluations of transfer and direct entry students. Further to this, data on pre-college performance (Grade 12) and college performance were obtained for some 500 students who entered the University in 1972 from V.C.C. These data formed the basis for an attempt to find relationships that might help to explain variations in achievement.

The "Articulation Study" had three major objectives: 1) to compare the performance of college transfer students with the performance of direct entry students at university; 2) to compare the university performance of students eligible for entry directly from secondary school with that of students ineligible for direct entry; 3) to try to relate the performance of transfer students at university to variables such as college grade-point average, age at time of transfer, level of college attainment and pre-college grade-point average.

## Performance of Transfer Students

Sessional examination results are categorized by the University of British Columbia according to three faculty groupings: 1) admission following Grade 12 (Group A); 2) admission following first year (Group B); and 3) admission following second or higher year (Group C). The majority of transfer students (77%) enter university in Group A faculties and the remainder transfer to Group B faculties. The distribution of transfer students for the 1972 and 1973 entry years by faculty is shown in Table 9-1.

The largest single proportion of college to university transfer students (30%) enter the Faculty of Arts. Education and Science faculties received the next largest proportion of transfer students, with slightly less than 20% enrolling in each. While there were slight variations in the enrolment percentages from difference colleges, it was evident that most transfer students enter the humanities or social science faculties.

The majority of transfer students (67%) enter university with one year of credit from a community college. These students enter either second year of Group A faculties (primarily Arts, Science, and Education) or first year of Group B faculties (primarily Commerce and Applied Science). Thirty-one percent of students enter university for the first time after successfully completing two years at community college: this generally represents about 300 students, 45% of whom enter third year in the Faculty of Arts (Table 9-2).

There was some speculation during the study that college students from institutions far distant from the province's universities might prefer to remain in their home communities for as long as possible prior to transfer. This was especially the case when it was observed that "closeness to home" and "low cost" were frequently reported as reasons for selecting attendance at a community college. While transfer students planning to enter faculties such as Commerce and Applied Science (Group B) are generally required to transfer after one year at college, this is not the case for students entering faculties such as Arts, Science, and Education (Group A). Nevertheless, in these latter cases only 37% of the students remained at community college for two full years before transferring to university. The ma-

jority of students, regardless of program or distance from home, apparently prefer to transfer after one year at a college.

Some educators have stated that performance during the first term or academic year after transfer to university is fairly predictive of subsequent performance. At the same time, others state that the initial performance after transfer will be lower than community college achievement and subsequent university achievement. These two statements deserve some attention.

**TABLE 9-1**
**COLLEGE TRANSFER STUDENTS ENTERING THE UNIVERSITY OF BRITISH COLUMBIA FOR THE FIRST TIME, BY COLLEGE, BY ENTRY YEAR, AND BY FACULTY**
**(Percentages)**

| College | Year of Entry | Group A Faculties[1] | | | | | Group B Faculties[2] | | | | Total No. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Arts | Scie | Educ | Other | Total | Comm | Ap Sc | Other | Total | |
| Camosun | 1972 | 10 | 20 | 10 | 10 | 50 | 20 | 10 | 20 | 50 | 10 |
| | 1973 | 15 | 15 | 24 | — | 54 | 15 | 7 | 24 | 46 | 13 |
| | Both | 12 | 17 | 18 | 5 | 52 | 18 | 8 | 22 | 48 | 26 |
| Capilano | 1972 | 31 | 16 | 17 | 14 | 78 | 15 | 3 | 4 | 22 | 73 |
| | 1973 | 27 | 21 | 13 | 5 | 66 | 22 | 6 | 6 | 34 | 83 |
| | Both | 29 | 19 | 15 | 9 | 72 | 19 | 4 | 5 | 28 | 156 |
| Cariboo | 1972 | 30 | 20 | 23 | 6 | 79 | 3 | 3 | 15 | 21 | 34 |
| | 1973 | 34 | 14 | 9 | 19 | 76 | 14 | 3 | 7 | 24 | 42 |
| | Both | 32 | 17 | 16 | 13 | 78 | 9 | 3 | 10 | 22 | 76 |
| Douglas | 1972 | 24 | 19 | 20 | 17 | 80 | 4 | 6 | 9 | 20 | 130 |
| | 1973 | 25 | 20 | 21 | 19 | 85 | 6 | 2 | 6 | 15 | 133 |
| | Both | 25 | 19 | 20 | 18 | 82 | 6 | 4 | 8 | 18 | 263 |
| Malaspina | 1972 | 25 | 22 | 10 | 22 | 79 | 7 | 10 | 4 | 21 | 41 |
| | 1973 | 30 | 22 | 11 | 19 | 82 | 10 | 6 | 2 | 18 | 37 |
| | Both | 27 | 22 | 10 | 21 | 80 | 8 | 9 | 3 | 20 | 78 |
| New Caledonia | 1972 | 28 | 18 | 27 | 5 | 78 | 14 | 4 | 4 | 22 | 22 |
| | 1973 | 25 | 25 | 6 | 16 | 72 | 11 | 6 | 11 | 28 | 36 |
| | Both | 26 | 22 | 14 | 12 | 74 | 13 | 5 | 8 | 26 | 58 |
| Okanagan | 1972 | 13 | 27 | 21 | 19 | 80 | 10 | 3 | 7 | 20 | 63 |
| | 1973 | 28 | 24 | 10 | 18 | 80 | 16 | 2 | 2 | 20 | 50 |
| | Both | 20 | 26 | 16 | 18 | 80 | 13 | 2 | 5 | 20 | 113 |
| Selkirk | 1972 | 14 | 29 | 14 | 23 | 80 | 15 | 5 | — | 20 | 56 |
| | 1973 | 20 | 8 | 32 | 20 | 80 | 12 | 4 | 4 | 20 | 50 |
| | Both | 17 | 19 | 22 | 22 | 80 | 14 | 5 | 1 | 20 | 106 |
| Vancouver | 1972 | 33 | 16 | 18 | 8 | 75 | 12 | 6 | 7 | 25 | 516 |
| | 1973 | 33 | 17 | 15 | 11 | 76 | 13 | 5 | 6 | 24 | 483 |
| | Both | 33 | 16 | 17 | 9 | 75 | 13 | 5 | 7 | 25 | 999 |
| Provincial Total[3] | 1972 | 28 | 18 | 19 | 12 | 77 | 11 | 6 | 6 | 23 | 1,024 |
| | 1973 | 29 | 18 | 15 | 14 | 76 | 13 | 5 | 6 | 24 | 968 |
| | Both | 29 | 18 | 17 | 13 | 77 | 12 | 5 | 6 | 23 | 1,992 |

1. Group A: admission following Grade 12
2. Group B: admission following first year
3. The Provincial total includes the colleges listed, the B.C. Institute of Technology and two small private colleges.

TABLE 9-2

COLLEGE TRANSFER STUDENTS ENTERING THE UNIVERSITY OF BRITISH COLUMBIA FOR THE FIRST TIME, BY ENTRY YEAR, BY LEVEL OF ENTRY, AND BY FACULTY

(Percentages)

| Year of Entry | Group A Faculties[1] | | | | | | Group B Faculties[2] | | | | | Total No. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Level of Entry | Arts | Scie | Educ | Other | Total | Level of Entry | Comm | ApSc | Other | Total | |
| 1972 | First | 30 | 30 | 11 | 29 | 100 | Note: entry into the first year of Group B faculties requires completion of one year of university or equivalent | | | | | 17 |
| 1973 | Year | 54 | 25 | 10 | 11 | 100 | | | | | | 28 |
| Both | | 45 | 27 | 11 | 17 | 100 | | | | | | 45 |
| 1972 | Second | 22 | 19 | 16 | 13 | 70 | First | 13 | 8 | 9 | 36 | 693 |
| 1973 | Year | 21 | 18 | 15 | 15 | 69 | Year | 15 | 8 | 8 | 31 | 623 |
| Both | | 21 | 19 | 15 | 14 | 69 | | 14 | 8 | 9 | 31 | 1,316 |
| 1972 | Third | 46 | 14 | 23 | 10 | 93 | Second | 4 | - | 3 | 7 | 303 |
| 1973 | Year | 44 | 17 | 17 | 12 | 90 | Year | 6 | - | 2 | 10 | 314 |
| Both | | 45 | 16 | 21 | 10 | 92 | | 5 | - | 3 | 8 | 617 |

1. Group A: admission following Grade 12
2. Group B: admission following first year

In the first instance it is implied that transfer student achievement at university will be fairly consistent with the achievement demonstrated during the first year of transfer. In other words, as far as academic achievement or standards are concerned, the transition from community college to university will be rather uneventful. In the second instance, a "transfer shock" effect is implied and, for one reason or another, first-year results will tend to be less than satisfactory in light of previous college work and subsequent university achievement.

In order to examine these opinions, a detailed analysis was made of the university standing of students at the end of their first year after transfer, as well as of those who had finished two or more years of university study following transfer.

Sessional examination results at the University of British Columbia are recorded as follows: Class 1 (80-100%); Class 2 (65-79%); Class P (50-64%); and Failed. In addition, results may be recorded as: Partial program passed; Standing granted in subjects passed (with or without supplementals); Standing not known; Year standing not applicable; and Withdrew/Cancelled/Deceased. In determining transfer students' performance, all the above categories were included in the totals used to calculate percentages. However, only First Class, Second Class, Pass and Failed categories are listed in Table 9-3. First Class standings were obtained by 5% of first time students. Year of university entry, that is, first year, second year, and so on, of a particular faculty had little bearing on the percentage achieving this top grade. Faculty entered was, however, a determining factor. Few students who enrolled in Education performed at a First Class level. Of Applied Science and Commerce transfer students approximately 3% earned a top grade, while Science students (11%) and Arts students (7%) did considerably better. At the other end of the performance scale, the transfer student seemed more likely to earn a Fail grade

than a First Class standing. While Arts and Science students earned slightly fewer Fail than First Class standings, the reverse was the case for the other faculties, with the failure rate generally somewhat higher than the rate for top achievement grades.

TABLE 9-3
DISTRIBUTION OF THE STANDINGS OF TRANSFER STUDENTS AT THE UNIVERSITY OF BRITISH COLUMBIA
(Percentages)

| Faculty | Session Ending | First Year After Transfer | | | | | Two or Three Years After Transfer | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sessional Standing[1] | | | | Total No. | Sessional Standing[1] | | | | Total No. |
| | | 1 | 2 | P | F | | 1 | 2 | P | F | |
| **Group A Faculties[2]** | | | | | | | | | | | |
| Arts | 1973 | 6 | 34 | 10 | 6 | 295 | 6 | 40 | 5 | 3 | 392 |
| | 1974 | 8 | 43 | 8 | 6 | 286 | 9 | 41 | 7 | 6 | 363 |
| | Both | 7 | 38 | 9 | 6 | 581 | 8 | 40 | 6 | 5 | 755 |
| Science | 1973 | 9 | 34 | 9 | 9 | 186 | 4 | 39 | [illegible] | 8 | 167 |
| | 1974 | 12 | 31 | 13 | 7 | 177 | 10 | [illegible] | 8 | 5 | 189 |
| | Both | 11 | 33 | 11 | 8 | 363 | 7 | 39 | 10 | 7 | 356 |
| Education | 1973 | 1 | 38 | 8 | 2 | 166 | 4 | 50 | 2 | - | 331 |
| | 1974 | 1 | 39 | 5 | 5 | 138 | 6 | 62 | 5 | 1 | 260 |
| | Both | 1 | 38 | 7 | 3 | 304 | 5 | 56 | 3 | 1 | 591 |
| Other | 1973 | - | 34 | 10 | 5 | 112 | 8 | 35 | 4 | 4 | 135 |
| | 1974 | 3 | 40 | 11 | 4 | 127 | 7 | 47 | 7 | 4 | 167 |
| | Both | 2 | 37 | 10 | 5 | 239 | 8 | 43 | 6 | 4 | 302 |
| Total | 1973 | 5 | 35 | 10 | 6 | 759 | 6 | 43 | 5 | 4 | 1,025 |
| | 1974 | 7 | 42 | 10 | 6 | 728 | 9 | 48 | 7 | 5 | 979 |
| | Both | 6 | 38 | 10 | 6 | 1,487 | 7 | 45 | 6 | 4 | 2,004 |
| **Group B Faculties[3]** | | | | | | | | | | | |
| Commerce | 1973 | 3 | 41 | 9 | 4 | 109 | 3 | 55 | 10 | 2 | 137 |
| | 1974 | 2 | 48 | 12 | 11 | 118 | 5 | 51 | 12 | 2 | 193 |
| | Both | 3 | 44 | 11 | 8 | 227 | 4 | 53 | 11 | 2 | 330 |
| Applied Science | 1973 | - | 26 | 15 | 5 | 53 | 8 | 48 | 19 | 3 | 101 |
| | 1974 | 4 | 22 | 13 | 9 | 44 | 7 | 60 | 9 | 1 | 93 |
| | Both | 3 | 24 | 14 | 7 | 97 | 8 | 54 | 14 | 2 | 194 |
| Other | 1973 | 10 | 38 | 8 | 5 | 70 | 4 | 65 | 10 | 2 | 83 |
| | 1974 | 11 | 44 | 14 | 4 | 61 | 11 | 49 | 13 | 3 | 99 |
| | Both | 10 | 41 | 11 | 5 | 131 | 8 | 56 | 12 | 2 | 182 |
| Total | 1973 | 5 | 37 | 10 | 5 | 232 | 6 | 56 | 13 | 3 | 321 |
| | 1974 | 5 | 42 | 13 | 9 | 223 | 7 | 53 | 12 | 2 | 385 |
| | Both | 5 | 39 | 11 | 7 | 455 | 6 | 54 | 12 | 2 | 706 |

1. Does not show: Partial program passed; Standing only in subjects passed; Year standing not applicable; Standing not known; Withdrawals.
2. Group A: admission following Grade 12.
3. Group B: admission following first year.

Transfer students performed considerably better in their second and subsequent years at university. Higher percentages of First and Second Class standings were earned and there was a corresponding drop in the failure rate. The most notable change occurred in the Group B faculties.

The evidence is clear: students do improve their achievement in the second and subsequent years after transfer, although there are variations in the rate of improvement according to faculty. Whether this improvement is due to a lessening of the "transfer shock" and the ability of students to adjust to a new educational experience, or whether it is a result of the "survival of the fittest," with the poorer students not returning for further study, is not clear. However, there is a likelihood that it is a combination of both processes.

If the hypothesis concerning the effect of transfer on the performance of students at university for the first time is reasonable, then a similar situation was evident for direct entry students. By definition, direct entry students could enter only Group A faculties directly from secondary school. The university performance of direct entry students, like that of transfer students, improved after the first year. However, in the case of the direct entry students, the improvement was much greater than for transfer students.

**TABLE 9-4**

**DISTRIBUTION OF THE STANDINGS OF DIRECT ENTRY STUDENTS IN GROUP A FACULTIES[1] AT THE UNIVERSITY OF BRITISH COLUMBIA**
**(Percentages)**

| Faculty | Session Ending | First Year After Transfer | | | | | Two or Three Years After Transfer | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sessional Standing[2] | | | | Total No. | Sessional Standing[2] | | | | Total No. |
| | | 1 | 2 | P | F | | 1 | 2 | P | F | |
| Arts | 1973 | 8 | 39 | 13 | 5 | 1,091 | 14 | 41 | 5 | 3 | 2,756 |
| | 1974 | 8 | 39 | 12 | 5 | 1,234 | 12 | 41 | 5 | 4 | 2,503 |
| | Both | 8 | 39 | 12 | 5 | 2,325 | 13 | 41 | 5 | 3 | 5,259 |
| Science | 1973 | 10 | 37 | 16 | 8 | 1,360 | 17 | 38 | 8 | 4 | 1,941 |
| | 1974 | 11 | 36 | 11 | 7 | 1,230 | 18 | 36 | 7 | 5 | 1,983 |
| | Both | 11 | 37 | 14 | 8 | 2,590 | 17 | 37 | 8 | 5 | 3,924 |
| Education | 1973 | 4 | 41 | 21 | 8 | 237 | 9 | 61 | 4 | 1 | 1,300 |
| | 1974 | 2 | 35 | 18 | 7 | 296 | 8 | 49 | 4 | 1 | 1,516 |
| | Both | 3 | 37 | 19 | 7 | 533 | 8 | 55 | 4 | 1 | 2,816 |
| Other | 1973 | 11 | 43 | 11 | 7 | 196 | 14 | 49 | 6 | 2 | 994 |
| | 1974 | 12 | 36 | 9 | 4 | 104 | 12 | 50 | 5 | 1 | 1,045 |
| | Both | 11 | 41 | 10 | 6 | 300 | 13 | 49 | 6 | 1 | 2,039 |
| Total | 1973 | 9 | 39 | 15 | 7 | 2,884 | 14 | 45 | 6 | 3 | 6,991 |
| | 1974 | 9 | 38 | 12 | 6 | 2,864 | 13 | 43 | 5 | 3 | 7,047 |
| | Both | 9 | 38 | 13 | 6 | 5,748 | 13 | 44 | 6 | 3 | 14,038 |

1 Group A: admission following Grade 12.
2 Does not show: Partial program passed, Standing only in subjects passed, Year standing not applicable, Standing not known, Withdrawals.

Data upon which this observation is based are shown in Table 9-4. It is, therefore, apparent that the performance of students improves after one year at university. It would appear that if there is a "transfer shock" phenomenon, it is not peculiar to transfer students.

It is possible that the performance improvement noted in the second and subsequent years at university is the result of a selection process where poorer the students withdraw, leaving a more select body which naturally shows improvement as a group.

In order to examine this assumption, the performance of individual transfer students was evaluated over a two-year period. The purpose was to determine how many of those who received a First Class standing in their first year of transfer received the same standing or dropped to a lower standing in their subsequent years. It was found that most transfer students improved their standing by 5% or more in their subsequent year at university. This was applicable to students at all levels of standing in their first year after transfer except those receiving a First Class. In this case the majority of transfer students did less well in their subsequent year (Table 9-5). This general trend was evident for students from most colleges; however, there were some exceptions (Table 9-6). Thus, the improvement noted in the subsequent performance of transfer students is not due merely to a selection process. There was, in fact, a general trend in the improvement of individuals as well as groups.

TABLE 9-5
COMPARISON OF THE STANDING OF TRANSFER STUDENTS IN THEIR FIRST YEAR AND IN SUBSEQUENT YEARS AFTER TRANSFER TO THE UNIVERSITY OF BRITISH COLUMBIA
(Percentages)

| Standing in First Year After Transfer | Subsequent Year Average | | | Total Number |
|---|---|---|---|---|
| | Higher[1] | Same[2] | Lower[3] | |
| First Class | 17 | 14 | 69 | 42 |
| Second Class | 48 | 8 | 44 | 312 |
| Pass | 69 | 7 | 24 | 80 |
| Fail | 88 | – | 12 | 8 |
| Other | 66 | 4 | 30 | 234 |
| Total | 55 | 7 | 38 | 676 |

1. Subsequent percentage standing is at least 5% greater than standing in first year after transfer.
2. Subsequent percentage standing is within 5% of standing in first year after transfer.
3. Subsequent percentage standing is at least 5% lower than standing in first year after transfer.

## "Transfer" or "Direct Entry"

A subject which is frequently analyzed and discussed is the performance of college transfer students at university in comparison with direct entry students, i.e., those who entered directly from secondary school. This is prompted by the desire to ensure that college academic standards are consistent with university standards. In making such comparisons, differences in the nature of the student bodies in these two entirely different types of institutions have often been overlooked.

TABLE 9-6

THE UNIVERSITY STANDING OF CONTINUING TRANSFER STUDENTS RELATIVE TO THEIR STANDING IN THE FIRST YEAR AFTER TRANSFER TO THE UNIVERSITY OF BRITISH COLUMBIA BY COLLEGE OF ORIGIN

(Percentag

| College | Subsequent Year Average | | | Total Number |
|---|---|---|---|---|
| | Higher[1] | Same[2] | Lower[3] | |
| Camosun | 56 | 11 | 33 | 9 |
| Capilano | 57 | 11 | 32 | 47 |
| Cariboo | 32 | 14 | 54 | 22 |
| Columbia | 50 | 17 | 33 | 12 |
| Douglas | 59 | 1 | 40 | 82 |
| Malaspina | 52 | 8 | 40 | 25 |
| New Caledonia | 50 | 13 | 37 | 16 |
| Okanagan | 45 | 5 | 50 | 40 |
| Selkirk | 68 | 3 | 29 | 34 |
| Trinity | 55 | 10 | 35 | 20 |
| Vancouver | 56 | 7 | 37 | 362 |
| B.C.I.T. | 57 | – | 43 | 7 |
| Total | 55 | 7 | 38 | 676 |

1. Subsequent percentage standing is at least 5% greater than standing in first year after transfer.
2. Subsequent percentage standing is within 5% of standing in first year after transfer.
3. Subsequent percentage standing is at least 5% lower than standing in first year after transfer.

Studies have not taken into account factors such as academic aptitude and socio-economic characteristics. Neither have they considered such factors as the quality of programs offered, retention standards, and general institutional philosophies. The ideal comparison of transfer and direct entry students should involve a matched group selected from both institutions. This, to date, has not been possible in British Columbia.

For the Articulation Study, transfer student performance was compared with that of direct entry students. As before, this was done for the three faculty group classifications at U.B.C. (groups A, B, and C).

At the First Class level, college transfer students do not do as well as direct entry students. In fact the proportion of direct entry students earning First Class standing is double that of transfer students (13% for direct entry students, 6% for transfer students). This was the case for all faculties studied.

At the other end of the performance scale, i.e., the "Fail" category, a greater percentage of transfer students received a "Fail" standing; however, in this case the difference was no more than one or two percentage points depending on faculty or faculty grouping (Table 9-7). In other words, the direct entry student performed at a higher level at university than did the transfer student. This applied to all students, whether in their first, or in subsequent years of transfer.

The same pattern of performance relationships was observed when individual departments were analyzed; that is, higher percentages of "Fail" standings and lower percentages of First and Second Class standings were achieved among transfer students. Seventeen departments were selected, all of which enrolled over one hundred transfer students. This trend was particularly evident in the Chemistry, Commerce, Mathematics, Psychology, Sociology, and Zoology departments (Table 9-8).

TABLE 9-7

STANDINGS OF TRANSFER AND DIRECT ENTRY STUDENTS BY FACULTY AT THE UNIVERSITY OF BRITISH COLUMBIA

(Percentages)

| Faculty | Session Ending | Transfer Students[1] Sessional Standing[2] 1 | 2 | P | F | Total No. | Direct Entry Students[1] Sessional Standing[2] 1 | 2 | P | F | Total No. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Group A Faculties[4]** | | | | | | | | | | | |
| Arts | 1973 | 7 | 38 | 8 | 5 | 687 | 13 | 41 | 7 | 4 | 3,847 |
| | 1974 | 9 | 42 | 8 | 7 | 649 | 11 | 41 | 8 | 5 | 3,737 |
| | Both | 7 | 39 | 7 | 5 | 1,336 | 11 | 41 | 7 | 4 | 7,584 |
| Science | 1973 | 7 | 37 | 10 | 9 | 353 | 14 | 38 | 12 | 6 | 3,301 |
| | 1974 | 12 | 36 | 11 | 7 | 366 | 16 | 37 | 9 | 6 | 3,213 |
| | Both | 9 | 36 | 10 | 7 | 719 | 15 | 37 | 10 | 6 | 6,514 |
| Education | 1973 | 3 | 46 | 4 | 1 | 497 | 8 | 58 | 7 | 2 | 1,537 |
| | 1974 | 3 | 47 | 4 | 2 | 498 | 7 | 47 | 6 | 2 | 1,812 |
| | Both | 3 | 47 | 4 | 1 | 995 | 8 | 52 | 6 | 2 | 3,349 |
| Other | 1973 | 5 | 36 | 7 | 4 | 247 | 13 | 48 | 7 | 2 | 1,190 |
| | 1974 | 5 | 44 | 9 | 4 | 294 | 12 | 49 | 5 | 1 | 1,155 |
| | Both | 5 | 40 | 8 | 4 | 541 | 13 | 48 | 6 | 2 | 2,345 |
| Total | 1973 | 6 | 40 | 7 | 5 | 1,784 | 13 | 44 | 9 | 4 | 9,875 |
| | 1974 | 8 | 45 | 8 | 6 | 1,807 | 12 | 42 | 8 | 4 | 9,917 |
| | Both | 6 | 42 | 7 | 5 | 3,591 | 12 | 42 | 8 | 4 | 19,792 |
| **Group B Faculties[4]** | | | | | | | | | | | |
| Commerce | 1973 | 4 | 49 | 10 | 4 | 246 | 10 | 56 | 8 | 3 | 796 |
| | 1974 | 4 | 50 | 13 | 6 | 311 | 11 | 58 | 7 | 3 | 887 |
| | Both | 3 | 49 | 11 | 4 | 557 | 10 | 57 | 7 | 2 | 1,683 |
| Applied Science | 1973 | 6 | 41 | 18 | 5 | 154 | 12 | 54 | 11 | 3 | 800 |
| | 1974 | 7 | 48 | 11 | 4 | 137 | 14 | 55 | 8 | 2 | 740 |
| | Both | 6 | 44 | 14 | 4 | 291 | 12 | 54 | 9 | 2 | 1,540 |
| Other | 1973 | 7 | 52 | 9 | 3 | 153 | 17 | 78 | 8 | 1 | 746 |
| | 1974 | 11 | 50 | 12 | 3 | 182 | 21 | 38 | 5 | 1 | 770 |
| | Both | 9 | 51 | 11 | 3 | 335 | 19 | 58 | 7 | 1 | 1,516 |
| Total | 1973 | 5 | 48 | 12 | 4 | 553 | 13 | 54 | 9 | 2 | 2,342 |
| | 1974 | 7 | 50 | 12 | 5 | 630 | 15 | 55 | 7 | 2 | 2,397 |
| | Both | 6 | 49 | 12 | 4 | 1,183 | 14 | 54 | 8 | 2 | 4,739 |
| **Group C Faculties[4]** | | | | | | | | | | | |
| Total | 1973 | 9 | 77 | – | – | 22 | 21 | 60 | 1 | 1 | 619 |
| | 1974 | 23 | 69 | – | – | 35 | 18 | 59 | 2 | 1 | 737 |
| | Both | 17 | 71 | – | – | 57 | 18 | 59 | 1 | 1 | 1,356 |
| **Group A+B+C Faculties** | | | | | | | | | | | |
| Total | 1973 | 6 | 42 | 8 | 4 | 2,359 | 13 | 46 | 9 | 4 | 12,836 |
| | 1974 | 8 | 47 | 9 | 5 | 2,472 | 13 | 45 | 7 | 4 | 13,051 |
| | Both | 6 | 44 | 8 | 4 | 4,831 | 13 | 45 | 7 | 3 | 25,887 |

1 Includes students in first year and subsequent years.
2 Does not include: Partial program passed.
Standing only in subjects passed.
Year standing not applicable.
Standing not known, Withdrawals.
3 Group A: admission following Grade 12.
4 Group B: admission following first year.
5 Group C: admission following second or higher year.

TABLE 9-8

TRANSFER AND DIRECT ENTRY STUDENTS OBTAINING GIVEN STANDINGS IN THE 1972-1973 ACADEMIC YEAR BY SELECTED DEPARTMENTS AT THE UNIVERSITY OF BRITISH COLUMBIA

(Percentages)

| Department | Transfer | | | | | Direct Entry | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Sessional Standing[1] | | | | Total No. | Sessional Standing[1] | | | | Total No. |
| | 1 | 2 | P | F | | 1 | 2 | P | F | |
| Anthropology | 25 | 45 | 11 | 1 | 278 | 29 | 26 | 9 | 3 | 751 |
| Biology | 19 | 36 | 25 | 5 | 487 | 18 | 33 | 25 | 5 | 3,317 |
| Chemistry | 15 | 32 | 31 | 10 | 513 | 28 | 34 | 25 | 7 | 2,020 |
| Commerce | 15 | 47 | 26 | 4 | 1,326 | 22 | 48 | 23 | 3 | 3,980 |
| Economics | 10 | 31 | 39 | 8 | 509 | 12 | 41 | 34 | 7 | 1,693 |
| English | 11 | 40 | 32 | 7 | 680 | 13 | 39 | 35 | 6 | 5,168 |
| Fine Arts | 15 | 53 | 24 | 1 | 274 | 17 | 56 | 17 | 1 | 1,107 |
| Geography | 8 | 42 | 29 | 7 | 534 | 12 | 45 | 31 | 5 | 1,598 |
| Geology | 6 | 31 | 42 | 11 | 218 | 11 | 43 | 37 | 4 | 1,040 |
| History | 7 | 38 | 35 | 6 | 379 | 10 | 50 | 30 | 3 | 710 |
| Mathematics | 12 | 30 | 33 | 11 | 936 | 27 | 28 | 24 | 9 | 8,381 |
| Physical Ed. | 21 | 42 | 22 | 3 | 879 | 23 | 45 | 19 | 2 | 2,514 |
| Physics | 17 | 40 | 27 | 6 | 381 | 19 | 40 | 29 | 5 | 1,988 |
| Political Sc. | 18 | 37 | 28 | 5 | 381 | 17 | 46 | 23 | 4 | 1,299 |
| Psychology | 16 | 48 | 24 | 2 | 760 | 26 | 36 | 12 | 3 | 4,050 |
| Sociology | 17 | 48 | 21 | 2 | 319 | 32 | 47 | 11 | 3 | 471 |
| Zoology | 9 | 49 | 25 | 3 | 275 | 20 | 52 | 21 | 2 | 934 |

1. Does not show: Partial program passed; Standing only in subjects passed; Year standing not applicable; Standing not known; Withdrawals.

## "Eligibility" versus "Direct Entry"

In the final analysis, it is not only a question of whether the college transfer student earned as good grades as the direct entry student, but rather whether the community college has done an adequate job in preparing for transfer those students who would have had little chance to work toward a baccalaureate degree had they not had the opportunity to attend a local community college. These students may best be defined as those who had earned less than the 60% secondary school average normally required for university entrance, or had not completed all subject requirements for university.

Secondary school records were not available for analysis on a provincial basis for all college transfer students. They could, however, be obtained for Vancouver Community College students entering the University of British Columbia in the Fall of 1972. The performance of this college's transfer students was evaluated for two sub-classifications of students, those eligible for direct entry and those not eligible, who had entered five selected faculties which accounted for over two-thirds of the transfer students. One-half of these students were eligible to have entered university directly from secondary school but elected to enrol at college instead. An additional one-third of the students were not eligible to enter university directly from secondary school, and for this reason had to attend a community college if they desired to continue with advanced post-secondary education. For the remaining 15% of students, pre-college records were not available. For the most part, these were either mature students or students from outside the province. The trend in performance may be observed from Table 9-9. Generally speaking, the

TABLE 9-9

PERCENTAGE OF DIRECT ENTRY STUDENTS AND V.C.C. TRANSFER STUDENTS, BOTH ELIGIBLE FOR DIRECT ENTRY AND INELIGIBLE FOR DIRECT ENTRY, OBTAINING GIVEN UNIVERSITY OF BRITISH COLUMBIA STANDINGS FOR THE 1972-1973 ACADEMIC YEAR, BY SELECTED FACULTY

(Percentages)

| Faculty | Direct Entry Students | | | | | | | V.C.C. Transfer Students | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Eligible for Direct Entry | | | | | | | Ineligible for Direct Entry | | | | | | |
| | University Standing | | | | | | Total Number | University Standing | | | | | | Total Number | University Standing | | | | | | Total Number |
| | 1 | 2 | P | F | W | O[1] | | 1 | 2 | P | F | W | O[1] | | 1 | 2 | P | F | W | O[1] | |
| Arts | 12 | 41 | 8 | 4 | 8 | 27 | 3,847 | 6 | 47 | 13 | 2 | 10 | 22 | 75 | 7 | 24 | 12 | 15 | 16 | 26 | 51 |
| Commerce | 8 | 55 | 8 | 3 | 0 | 26 | 796 | 8 | 48 | 14 | 2 | 21 | 7 | 35 | 0 | 46 | 6 | 6 | 14 | 28 | 15 |
| Applied Sc. | 11 | 52 | 12 | 3 | 2 | 20 | 800 | 0 | 50 | 25 | 0 | 0 | 25 | 4 | 0 | 16 | 33 | 8 | 17 | 26 | 12 |
| Science | 14 | 38 | 12 | 7 | 2 | 27 | 3,301 | 11 | 35 | 0 | 17 | 14 | 23 | 34 | 0 | 19 | 15 | 11 | 11 | 44 | 26 |
| Elem. Educ. | 7 | 55 | 6 | 1 | 2 | 29 | 887 | 0 | 38 | 7 | 7 | 15 | 33 | 13 | 0 | 37 | 12 | 0 | 25 | 26 | 8 |
| Total | 12 | 44 | 9 | 4 | 4 | 27 | 9,631 | 7 | 44 | 9 | 5 | 13 | 22 | 161 | 3 | 25 | 13 | 12 | 15 | 32 | 112 |

1. Includes: Partial program passed; Standing only in subjects passed; Year standing not applicable; Standing not known.

major portion of the "Fail" students were from the group who were ineligible for direct entry to university: they received few First Class grades. As a matter of interest, the withdrawal rate for students eligible for direct entry was only slightly less (13%) than for those ineligible (15%). In both cases these percentages were considerably larger than the 4% withdrawal figure of direct entry students.

The important consideration is, however, the success of some 40% of students who were considered ineligible for entry to university when they finished secondary school. The community college gave them the opportunity for a second chance which for many became a successful reality.

## Other Variables

The initial stage of a computerized data base whereby the transfer student's pre-college record, college record, and university record can be analyzed was completed for Vancouver Community College. In its final form it would include a variety of additional variables.

In the meantime, some observations have been made on three points. These were based on 329 students, and while the results may not be representative of the transfer student population for all nine provincial colleges, they nevertheless provide some interesting points for future consideration.

A 2.0 (C standing) cumulative college grade-point average has been generally accepted as the minimum college performance required to enter university. While this G.P.A. would seem to be a realistic requirement in light of achievement after transfer, it was evident that a 2.5 cumulative college G.P.A. would ensure at least twice the proportion of First and Second Class standings among transfer students at university and virtually eliminate the prospect of failure.

A previous study[2] conducted on transfer students within the province found that mature transfer students (24 or more years of age at time of transfer) were more likely to receive higher performance ratings after transfer to the university than were the younger college age students. A reassessment of these results was not possible in this study due to a rather small number of mature students. However, from the limited data available, it would appear that the mature student is likely to achieve higher performance ratings compared to the college age student in the humanities or social sciences faculties, while the reverse is true in the pure science faculties.

Earlier in this chapter it was noted that nearly two-thirds of students transferring to university do so at the end of their first year at college. In comparing students who had completed one year at college prior to transfer with those who had completed two years, no significant difference in university performance was found. The limited data presently available do not support the theory that a student will do better at university after completing two years of college rather than just one year.

## Synopsis

The community colleges are making it possible for an increasing number of secondary school graduates and non-graduates to begin working toward a baccalaure-

2 John D. Dennison and Gordon Jones, *The Community College Transfer Student at the University of British Columbia - a Three Year Study*, Vancouver Community College, Vancouver, B.C., March 1970.



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ate degree who would not otherwise be able to do so for geographic, academic or economic reasons. For example, roughly one-half of transfer students did not have the pre-college requirements to enter university directly. Yet of this group, 40% did succeed; these students would not have had the opportunity for a university education had it not been for the two-year college.

There are individuals who tend to under-estimate the contribution of the community college to post-secondary education and to view it as a sanctuary for both intellectual and financial "have nots." To a point this is true, judging by the large number of average and marginal students found in this study. However, an increasing number of students seeking post-secondary education are electing to start this process via the two-year comprehensive community college. There is no doubt that their performance after transfer, at least during the first year, is not as high as that of direct entry students. Transfer students did not obtain as many First Class marks, but their failures and withdrawals were not significantly greater than those among students who entered university directly from secondary school.

In subsequent years of transfer, that is after the first year at university, it became difficult to identify former college students on the basis of their performance, which was comparable to that of students who originally commenced their degree studies at university.

## SUMMARY

Community colleges in British Columbia have been in operation for close to ten years, enrolling some 22,000 full-time and part-time students in 1973-74. The majority of these students (70%) enrolled in academic courses designed to provide transfer to a university. Of these, less than one in ten actually transferred. Yet, studies of college students have tended to emphasize this small percentage of students. On the other hand, the career/technical and vocational student has been largely ignored in formal research projects. The difficulty in locating these students after leaving college has played no small part in this matter. However, when contacted shortly after leaving the college, three-quarters of the graduates were employed on a full-time basis, not always in an occupation closely related to their college study, yet generally satisfied with their position and job prospects.

While not always favourable, students' assessment of their college experience was constructive, and they could expect jobs and salaries that appeared to be somewhat higher than average. Where dissatisfaction was evident, and it occurred in service occupations somewhat more frequently than elsewhere, it was more with the actual choice of career rather than with college programs. Better occupational counselling could help to overcome this difficulty.

While colleges are achieving their goal of meeting the employment needs of the community, from the graduate's point of view they have not yet succeeded in providing the prestige in the eyes of the community which the graduate apparently expects.

The transfer to university function of the college has received widespread publicity, yet only five percent of college students actually transfer. For those who do, the community college is doing an effective job in educating not only good students, but also those with prior inadequate standing for admission to university

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The usual basis for assessing the success of college to university transfer students has been to evaluate them by university criteria. If they did well at university compared to direct entry students, it was concluded that the community colleges have done a good job. In other words, whatever was done at university was regarded as the appropriate yard-stick, and if the colleges followed suit, they too must be doing well. There are strong reasons to suggest that university performance should not be the only basis for assessing college transfer students. As the two-year college programs are expanding and becoming more necessary for many types of employment, it is not unreasonable to suggest that the basis for evaluating college students be extended beyond university standards of performance.

Chapter 10

# A COMMUNITY VIEWPOINT

There is little doubt that the community colleges of British Columbia have provided a broader base for community participation in post-secondary education. However, if the community colleges are to be completely effective, an on-going opportunity is necessary for all segments of the community to express their views about the role of colleges. With few exceptions, the views of the local community, which represents a major segment of the potential college clientele, have not been assessed in studies of colleges.

Studies of the views of the employers of college students have also been minimal, with only limited input from this group available through Advisory Boards. These Boards represent the broad views of employers or potential employers in various career fields. Employer advisory groups may not necessarily reflect the opinions of the many enterprises that are not members.

Much less is known about the college-related views of the vast majority of the community. With the growing philosophy that post-secondary education is no longer a privilege but a right, comes the belief that all citizens of the community are potential clients of the comprehensive community college. Some appreciation of the views of the community at large is, therefore, becoming increasingly important.

Whether members of the community actually take advantage of the opportunities offered by the community college depends to a large extent on what it does to attract them. Many imaginative and innovative ideas are being developed on the campuses of the province's colleges but what their impact has been, or may reasonably be expected to be, remains to be determined.

Two studies of a limited nature were undertaken as part of the *Impact Study* to investigate some of the questions that could be considered important in assessing the influence of the college on the community: 1) a general community survey, and 2) a survey of the business community as represented by the Vancouver Board of Trade.

## GENERAL COMMUNITY SURVEY

This study involved a survey in July 1972 of the community served by Vancouver Community College. A random 1% sample of the households in the city



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was selected from the Vancouver Directory. A covering letter, a business reply envelope and four questionnaires were mailed to each of the 1,184 households in the sample, with the request that each adult member of the household complete one questionnaire.

Usable returns were received from 161 of the sample households, or 13.6%. From these 161 households, a total of 259 questionnaires were received. The small percentage of responses would not necessarily be a serious problem if they could be considered representative of the community at large. However, the sample returns were not fully representative of the demographic characteristics of the entire community, as determined by comparison with the 1971 Census of Canada.

Compared to the community as a whole, respondents were from smaller households, younger and from higher educational and occupational categories. A number of observations worthy of mention were made, although it must be strongly emphasized that these are based on data that may not be fully representative of the Vancouver community. In summary, it was found that:

— knowledge about the college was not widespread;
— there was little interest in academic transfer courses;
— job preparation was regarded as an important purpose of the college;
— community college facilities were regarded as a welcome addition to the community.

**Knowledge about College**

About three-quarters of the respondents were aware of the existence of the community college. While age and formal education did not appear to be significant factors here, there was some evidence that those with below average incomes were less likely to be aware of the college. Over 30% of households with average or below average income were not aware of the existence of the college as compared with only 10% of those above average.

While this point is far from conclusive in itself, it would seem to support the view that the community college is still not reaching all segments of the community it is intended to serve. These data further support findings reported in Chapter 5, which indicated that while 57% of Vancouver families reported annual incomes of less than $10,000, only 49% of college students were from such families.

Ten percent of respondents had taken courses or programs at the college, and nearly two-thirds of those responding indicated a desire to know more about it. Citizens from below average income households were generally as interested in knowing more about the college as were those from the average and above average income brackets.

The challenge to the college would appear to be the method of contact with these lower socio-economic families. The comprehensive college may achieve its full impact only when the opportunity to participate in college activities is made not only available, but known to all.

Respondents to the questionnaire identified newspapers and newsletters as the most effective media for publicizing college information, with the below average income group demonstrating a slightly greater preference for radio and television than the more affluent members of the community (Table 10-1).

TABLE 10-1
MOST EFFECTIVE METHOD OF DISSEMINATING COLLEGE INFORMATION TO THE COMMUNITY
(Percentages)

| Annual Income | Information Method | | | | |
|---|---|---|---|---|---|
| | Newspaper | Radio | T.V. | Newsletter | Total |
| Above average | 39 | 8 | 14 | 39 | 100 |
| Average ($10,000) | 34 | 7 | 23 | 36 | 100 |
| Below average | 30 | 15 | 26 | 29 | 100 |

## Type of Program

Approximately 25% of the students at V.C.C. are enrolled in academic transfer programs; of these, less than 20% actually transfer to university. Clearly, the college serves a majority of students who are not interested in transfer to university. This is consistent with the fact that very few respondents to the community survey showed any interest in courses that could lead to university.

Greatest interest was shown in Art and Applied Arts courses, and in academic courses of *general interest*, these being indicated by 43% and 31% of respondents respectively. This was especially true for citizens from above average income households. In cases where preference was indicated for academic transfer, vocational, or career/technical programs, it was primarily on the part of the younger male member of the community.

## Objectives of Post-Secondary Education

Forty percent of the general community indicated the learning of skills that lead to a job as the most important purpose of a community college, with little difference in this view evident between males and females. One-half of families with average or below average income expressed this viewpoint, compared to only one-third of the above average income families (Table 10-2). The latter largely felt that the college should prepare students for university. There was clear evidence that the lower the level of formal education of the community member, the greater the probability that he or she would indicate that the purpose of the college should be to provide training in specific job skills. In fact, two-thirds of the respondents

TABLE 10-2
INDICATED PURPOSES OF THE COMMUNITY COLLEGE BY INCOME GROUP
(Percentages)

| Purpose | Annual Income | | | |
|---|---|---|---|---|
| | Above Average | Average ($10,000) | Below Average | Total |
| Training for specific job | 33 | 42 | 47 | 41 |
| Opportunity to continue to university degree | 48 | 28 | 31 | 36 |
| Personal satisfaction | 17 | 20 | 18 | 18 |
| Meet others and seek new interests | 2 | 10 | 4 | 5 |
| Total | 100 | 100 | 100 | 100 |

who listed their highest level of formal education to be "one or two years of secondary school" looked upon the objective of the college as training for specific skills. As the level of formal education increased, the proportion indicating job training as a basic purpose of the college dropped, until less than one-quarter of respondents who completed a graduate degree listed job training. Conversely, as the level of formal education increased, so did the desire to see the purpose of the college as one of providing education that would eventually lead to a university degree. Just one-fifth of the community expressed the view that the purpose of the college should be to enable a student to obtain "personal satisfaction."

### Use of College Facilities

The provincial community colleges have expanded their scope to include a wide variety of groups with special needs and interests. However, in addition to the many groups who use college facilities in a formal educational way, there are many citizens who would like to use them for recreational purposes. Eighty percent of respondents favoured the use of college facilities by the general community. In other words, it would appear that the majority of the public look upon college facilities as "theirs." These facilities (e.g. gymnasium, library, cafeteria, day care centre) are not regarded as the special domain of those who have registered for courses and paid fees.

There was a slight tendency for better educated respondents to be less receptive to general community use of college facilities. For example, while nearly 100% of persons with less than three years of secondary schooling believed in general community use of college facilities, this percentage dropped to 60% of those who had completed at least some graduate study at university.

Acceptance of the community college concept seems to be widely acknowledged, with 83% of those surveyed indicating that more community colleges should be established in the province. Community members favoured the idea of a college campus relatively close to home. Three-quarters of citizens were in favour of a community college campus in their neighbourhood, with this view particularly prevalent among those of middle age.

## BUSINESS COMMUNITY SURVEY

Maintenance of a constant flow of information between the college, students, employers, and potential employers is a necessity if problems resulting from differences in priorities and values are to be avoided. Advisory Boards, composed mostly of members from the appropriate area of the business or professional community, together with representatives of the college, help bridge the gap between the business and the college communities.

There has, however, been a lack of direct information from the individual within the business community concerning such items as the "objectives of post-secondary education" and the potential weaknesses of the comprehensive community college concept.

In this chapter opinions of members of the business community concerning matters of college education and training will be presented under three headings:

— job recruitment;
— objectives of post-secondary education;
— assessment of college graduates.

In September 1974, questionnaires entitled "A Survey of the Business Community's Views of Community College Graduates" were mailed through the auspices of the Vancouver Board of Trade to its members. Of the 1,500 questionnaires sent, 20% were completed and returned.

Returns were fairly representative of the general business community with responses from manufacturing firms, service industries, retail trade, and finance and real estate operations. The size of businesses surveyed ranged from less than 11 full-time employees (14%) to over 250 employees (12%). Of the businesses responding, one in five reported a volume of business in 1973 as less than $0.5 million, while one-half reported a dollar volume of over $2 million.

**Job Recruitment**

At a time when the unemployment rate in the province was relatively high (7%), it was of some surprise to find that nearly two-thirds of employers expressed problems in recruiting qualified personnel. This was particularly the case for employers in manufacturing, construction, trade, and community services. Size of business, as measured by number of full-time employees, did not appear to be a factor in recruitment problems.

The basic cause of recruitment difficulties was the lack of applicants, according to 51% of the employers. It is doubtful whether the community college is in any position to increase the flow of applicants, but for the 15% of employers who reported "plenty of applicants, but inadequate formal training," (mostly in manufacturing, construction, trade, and community service occupations) there is every probability that the colleges could provide the required training.

One of four employers reporting recruiting problems indicated that while there were plenty of applicants with adequate formal training, they lacked sufficient practical experience. This suggests a necessity on the part of the colleges to incorporate a greater proportion of field work into existing programs in order to make graduates more acceptable to the employers.

While not offered as a response option with respect to the causes of recruiting difficulties, 6% of employers did write in the problem of "unwillingness to work," or words to that effect. From their written comments at the end of the questionnaire, it appeared that these employers were fairly equally divided as to the cause: 1) an over-abundance of social security benefits, which has led to a lack of incentive to work; and 2) an educational system (not necessarily restricted to higher education) that has not instilled an attitude of responsibility in students about life's obligations.

While there was little in the results of the Board of Trade survey to indicate any serious criticism of community college activities, it could reasonably be concluded that the impact of the college in certain employment areas would be stronger if better formal training were given, and greater emphasis placed on practical experience.

## Objectives of Post-Secondary Education

Part of the dilemma of the community college may have been its attempt to be "all things to all people." If the objectives of the college as seen by various segments of the community (including students, teachers, employers and citizens generally) are to be rationalized, then problems in educational priorities may be created. It was shown earlier in this chapter that differences of opinion exist on the part of the general community about the objectives of post-secondary education.

While 41% of the community indicated the "learning of specific skills required for a trade or profession" as the prime purpose of the community college, the employers or potential employers of the college student did not entirely agree. "To learn to think constructively and critically" was rated as the most important purpose by 51% of employers, with 37% of them indicating the learning of specific skills for a trade or profession.

## Assessing the College Graduate

Probably one of the most meaningful ways of evaluating the effectiveness of the college is to measure the distribution of college graduates in the business community.

Only 36% of the employers responding had hired former students of a comprehensive community college. Although a considerable proportion of employers had indicated difficulty in hiring competent workers, half of these businesses had not hired former college students, either graduates or non-graduates. Of all the business categories, the one hiring the highest percentage of former college students was the transport industry (70%). Forty-three percent of manufacturing industries had hired former college students, compared to 30% of all other industries.

An important aspect of the impact of colleges on the business community is its readiness to accept graduates from the various college career/technical and vocational programs. Acceptance of the college "product" requires an evaluation of college training programs, and of the competence of college graduates.

In the first instance, the assumption is made that business individuals actually know enough about college programs to make an evaluation. Employers were asked to evaluate community college training for positions where they required such training. Twenty-two percent made no reply, perhaps because they did not have jobs in their businesses which required college training. Of those who did respond, 37% evaluated the training as "good," while a similar number were "uncertain." Only 5% felt the training was "poor" in relationship to their requirements. Of concern to this study is the fact that such a large proportion was "uncertain." Is it the obligation of the college to ensure that employers of college graduates are adequately briefed on the particular program, or is it the responsibility of the business concerned to acquaint itself with the college program? Either way, if the full impact of college training and education in the general business area is to be realized, efforts should be increased to enable the "uncertain" category to become knowledgeable about the relevant programs.

With regard to the second assessment area, the competence of the college graduate, some interesting points were noted.

First, the survey question was negatively worded in that it asked for *weaknesses* in the competence of the college graduate. Six areas of possible inadequacies or weaknesses were listed with the request that the employer indicate, in rank order,

the alternatives applicable. Approximately 50% of the employers did not respond to the question, presumably indicating that either they did not find any great weakness in the competence of community graduates, or they were not capable of commenting on this question. An "inadequate knowledge of specific skills" was indicated as the most important weakness by 17% of the employers, and the "inability to communicate orally and in writing" was next in importance with 12% of employers indicating this (Table 10-3).

TABLE 10-3
MOST IMPORTANT WEAKNESS IN COMPETENCE OF COMMUNITY COLLEGE GRADUATES AS REPORTED BY EMPLOYERS
(Percentages)

| Weakness | Most Important |
|---|---|
| Inadequate knowledge of specific skills | 17 |
| Inability to communicate orally and in writing | 12 |
| Poor attitude toward work | 8 |
| Inability to think constructively and critically | 7 |
| Inadequate general education | 3 |
| Problems in getting along with other people | 1 |
| Other | 3 |
| No response | 49 |

Even though various weaknesses in college training were identified by employers, the vast majority reported that formal training would generally result in better job performance. All told, as far as any inadequacies in respect of formal training were concerned, a "poor work attitude" identified as simply "laziness," and a lack of practical skills needed in the "real world," were each indicated by approximately 20% of the respondents.

Employee turnover varied widely with one-half of the employers indicating that from one to ten employees left their jobs during the year. Five employers (2%) reported that over 500 employees left their employment for various reasons. In the above cases, employers indicated that they hired new employees to fill the job vacancies. Nearly three-quarters of the replies indicated that the employer was prepared to hire a community college graduate in preference to a secondary school graduate, other circumstances being equal.

Only 40% of employers were prepared to pay the college graduate a higher starting salary than to the secondary school graduate. Twenty-five percent of the employers were not prepared to reward the college student for the one to two years of study beyond secondary school, while a further 35% stated that any differential in salary for the college graduate over the secondary school graduate "depends entirely upon performance." A general interpretation of responses on this topic could be that while a substantial proportion of employers would prefer a college graduate, nearly two out of three would not be prepared to recognize, at least initially, that this additional training produced an employee who was entitled to a higher starting wage. If this statement is generally valid, it is questionable whether the community college movement has had the impact on the business community that might be desired.

On the other hand, it did appear that employers felt that the potential of the

**TABLE 10-4**
**OBJECTIVE OR MAIN PURPOSE OF THE COMMUNITY COLLEGE AND POST-SECONDARY EDUCATION**
**(Percentages)**

| Objective | Post-Secondary Student | | | College Faculty | | Business Community | Purpose[1] | General Community |
|---|---|---|---|---|---|---|---|---|
| | Academic Transfer | Career/ Technical | Vocational | Academic Transfer | Other Programs | | | |
| Learning skills that lead to a job | 22 | 42 | 54 | 13 | 49 | 37 | Training for a specific job | 41 |
| Learning skills and habits used in critical and constructive thinking | 26 | 22 | 17 | 60 | 36 | 51 | Opportunity to continue education leading to university degree | 36 |
| Attaining satisfactory emotional and social adjustment | 18 | 15 | 11 | 10 | 9 | 8 | Meet others and seek new interests | 5 |
| Developing a broad general outlook on a variety of subjects | 34 | 21 | 18 | 17 | 6 | 4 | Personal satisfaction or fulfillment | 18 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | Total | 100 |

1. Questionnaire wording on the general community survey was different from that used on the other surveys.

college graduate was greater than that of a person without formal training. This was the view reported by two-thirds of employers. An additional one-quarter felt that job performance would be the basic criterion for advancement.

## SUMMARY

A survey of a random sampling of households in Vancouver and a survey of businesses through the Vancouver Board of Trade provided data on opinions of the community about colleges.

What is the purpose of a community college? This question was asked of various groups during the course of the *Impact Study* and it was found that their views varied widely. Table 10-4 shows that students expressed varying opinions depending on their program of study. College faculty members saw the objectives differently, as did the community. With this variety of views among the students, faculty, employers, and the community at large about objectives, the full potential of community colleges may not be realized until these differences are resolved.

**Chapter 11**

# THE COLLEGE FACULTY

*"The accusation is often made that college faculty members are opposed to educational change. The stereotype in the popular press and in much of the educational literature is that they are insensitive to student needs and interests; that they are more interested in research, consulting, and attending meetings than in teaching; and that they are the major block to making college education more relevant."*[1]

In the early days of the community colleges in British Columbia, one of the major concerns regarding staffing was *quantity*. The colleges were totally new, the universities had not prepared personnel for the college system and, as a result, former secondary school teachers took up the role. Over the past decade the *quantity* problem has changed to one of *quality*. This is due to many factors: a changing attitude by colleges toward faculty recruitment; a shortage of jobs; and an increased number of advanced degree holders, especially in the humanities and social sciences. Now the B.C. situation finds many areas where the supply of instructors exceeds demand.

In such a situation it would be expected and hoped that college councils would critically review their standards for employment. The whole question of the formal qualifications necessary for teaching will bring into focus the concerns regarding faculty and their abilities.

Who are the faculty? From where did they come? What past experience do they bring to the college? What views do they hold on college issues? Answers to these questions may well indicate the direction of college development expected by the faculty.

One of the major concerns of the *Impact Study* was the degree to which faculty views were consistent with the community college philosophy. This philosophy was discussed in Chapter 1. For convenience it is summarized in the following set of goals:

1) to develop and preserve a comprehensive curriculum;
2) to make college education accessible to both college age and adult students;
3) to decentralize college facilities in order to increase geographic accessibility;

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1. Robert C. Wilson and Jerry C. Gaff, *The Research Reports*, The Centre for Research and Development in Higher Education, University of California, Berkeley, California, Vol. 5, No. 4, 1970.

4) to design programs to meet local manpower needs;
5) to emphasize the importance of teaching;
6) to provide students with highly developed student services.

In 1973, a survey of college faculty members was undertaken as part of the *Impact Study*. Its purpose was to produce comparative evidence about the attitudes and opinions of faculty members throughout the province. The impetus for such a study came from faculty members themselves. Through the College Faculties Federation (C.F.F.) and the Society of Vocational Instructors (S.V.I.) - two provincial organizations representing the various faculties within the province - faculty members offered valuable suggestions concerning questionnaire formats and administrative procedures.

At only one community college, the College of New Caledonia, was the faculty opposed to involvement in the study, requesting that it be made known that these results do not necessarily reflect their views.

The views expressed in this chapter are based on the responses of 700 out of the 1,400 faculty members at seven participating colleges.

For convenience, the results of the college faculty survey will be discussed under three broad headings:

— a profile of faculty members;
— college and administrative structure;
— educational philosophy.

## A PROFILE OF FACULTY MEMBERS

The faculty questionnaire provided data pertaining to the composition of college faculty and, to some extent, their workload. Some general observations of college faculty are presented in Figure 11-1 together with similar data about faculty at the University of British Columbia. These data are discussed below.

### Composition

Over three-quarters of college faculty members were male, and two-thirds were over 34 years of age. In the academic transfer area, where students are younger, there was a higher proportion of younger faculty members, 43% being under 35.

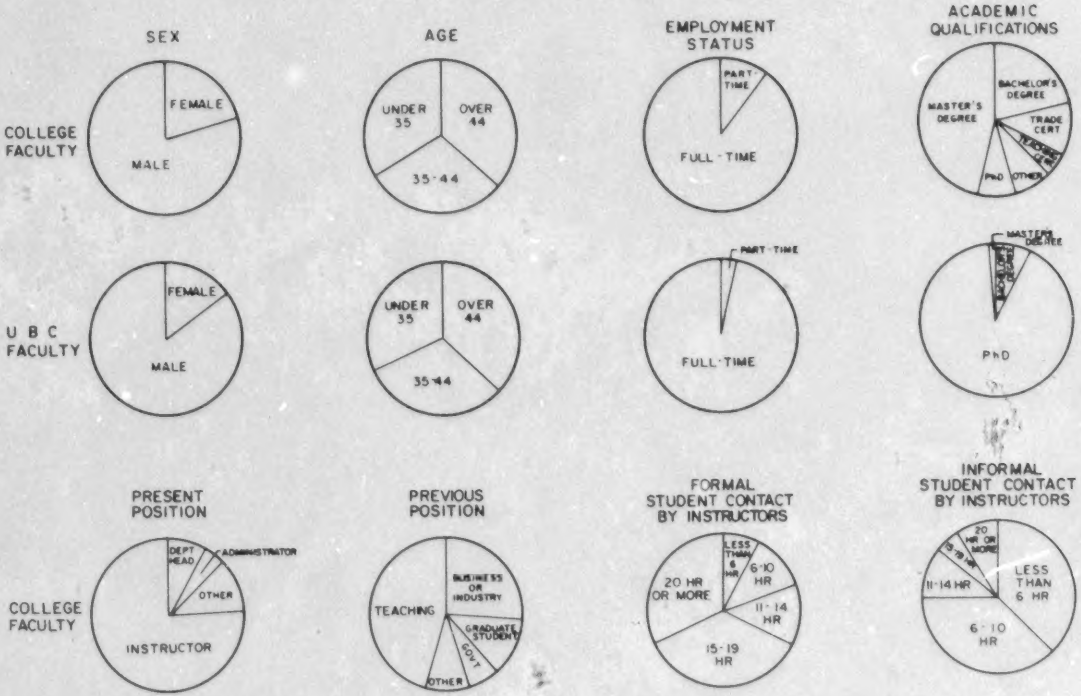
Ninety percent of faculty surveyed were appointed on a full-time basis and over three-quarters listed their present position as "instructor." Eight percent were employed as Division or Department Heads, and a further 4% were in administrative positions. One-half of the academic transfer instructors taught either in the social sciences or humanities, while a further one-quarter taught primarily in the sciences.

It has been generally established that the Master's degree is the minimum requirement for faculty in the academic transfer area. However, one-fifth of academic transfer faculty members did not possess this qualification and had either a Bachelor's degree or a public school teaching certificate. At the other end of the scale, 17% had Doctoral degrees.

In the career/technical area, 70% of faculty had degree qualifications, over half of them a Master's degree or higher. In the vocational area, over half of faculty

Figure II-1

A PROFILE OF COLLEGE FACULTY AND
A COMPARISON WITH FACULTY AT THE UNIVERSITY OF BRITISH COLUMBIA



held trade certificates or similar credentials. The full breakdown of qualifications is shown in Table 11-1.

Nearly half of vocational and career/technical faculty came from business or industry. About 27% of academic transfer faculty and 10% of faculty from other fields came from the public school system. Overall, about one-half of faculty members previously held teaching positions (Table 11-2)

TABLE 11-1
QUALIFICATIONS OF COLLEGE FACULTY
(Percentages)

| Qualifications | Academic Transfer | Career/ Technical | Vocational | Total |
|---|---|---|---|---|
| Trade certificate | — | 18 | 36 | 11 |
| Bachelor's degree | 16 | 33 | 12 | 21 |
| Master's degree | 63 | 34 | 6 | 46 |
| Doctoral degree | 17 | 3 | — | 9 |
| Teaching certificate | 2 | 2 | 25 | 5 |
| Other | 2 | 10 | 21 | 8 |
| Total | 100 | 100 | 100 | 100 |

## Workload

Instructors in areas other than academic transfer are required to have more "formal student contact" (i.e., student-instructor contact in classes, laboratories and shops) than are academic transfer personnel. Correspondingly, half of them spend 20 or more hours per week in formal student contact, while the majority of academic transfer faculty spend 15 to 19 hours. Nearly two-thirds of those faculty identified as administrators averaged at least 6 hours a week in formal student contact.

Informal student contact would occur outside the classroom. This might be in the instructor's office or under recreational and/or social circumstances. Academic

TABLE 11-2
PREVIOUS POSITION HELD BY COLLEGE FACULTY
(Percentages)

| Previous Position | Academic Transfer | Career/ Technical | Vocational | Total |
|---|---|---|---|---|
| TEACHING: | | | | |
| University | 20 | 5 | 3 | 13 |
| Vocational school | — | 4 | 22 | 5 |
| Technical institute | 2 | 6 | 2 | 3 |
| College | 9 | 3 | 4 | 6 |
| Public school system | 27 | 10 | 14 | 19 |
| LIBRARY: | | | | |
| Public, college, university | — | 2 | — | 2 |
| GRADUATE STUDENT | 24 | [illegible] | — | 12 |
| BUSINESS OR INDUSTRY | 6 | 46 | 46 | 26 |
| GOVERNMENT EMPLOYEE | 3 | 12 | 4 | 6 |
| OTHER | 9 | 8 | 5 | 8 |
| Total | 100 | 100 | 100 | 100 |

transfer personnel averaged 6 to 10 hours a week in informal student contact while other faculty averaged less than 6 hours. This latter statistic corresponds to the heavier formal contact workload of these faculty members.

At least another 11 hours a week are spent in preparation for specific classes, laboratories and shops. Some 60% of academic transfer faculty and 40% of other faculty members spend more than 10 hours per week in class preparation.

Other professional activities such as committee work, research, study, and discussion with colleagues require approximately another 10 hours a week. Administrators, as one might expect, spend a significant amount of their time in such activities with over 35% indicating that they spend 20 hours or more.

## COLLEGE AND ADMINISTRATIVE STRUCTURE

Faculties' views on the existing college and administrative structures may be very important in assessing the future development of the community college system. This section analyses some of the opinions of faculty members.

The framework provided by the legislative enactments within which colleges operate have an important bearing on the structure and direction of college growth.

In British Columbia the colleges operate under a section of the Public Schools Act. Fewer than 5% of faculty members supported a continuation of this situation. The majority of faculty favoured a separate College Act for the province. This position was held by nearly two-thirds of the administrators and by almost half of the instructors. A substantial minority of the faculty were in favour of the college operating under an Act covering the operation of all post-secondary institutions.

At the governmental level, the Minister of Education is responsible for the entire educational system of the Province. One-fifth of college faculty favour of the creation of a new position of Minister of Post-Secondary (or Advanced) Education. Approximately one-half would retain the current structure, whereby the entire educational system is within one department, but with the provision of a Deputy Minister of Post-Secondary Education. The Deputy Minister concept was more strongly supported by the older faculty members than by the younger ones.

While faculty members were fairly explicit regarding the type of legislation needed to regulate post-secondary education and the type of governmental structure that should be provided they were not as certain about the role of students in the formulation of policy.

Students have been asking for less restrictive rules in their social and personal lives, and for changes in curricula. They have also been asking for a greater voice in the formulation of college policy, curriculum content and related issues. The responses of faculty to questions pertaining to student participation showed considerable variation.

A consensus of opinion was definitely reached on one point: students should at least have *some* say in formulating college policies. However, just what form this student involvement should take was not agreed upon. The views that students should be consulted informally, and that students and faculty should attempt to reach a consensus, were each supported by one quarter of the respondents. There was evidence of considerable reluctance by instructors and administrators to share their academic power with the student body. Only about 10% of faculty members



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felt that students should have an equal vote on educational policy matters whereas 25% of support staff were in favour of this point of view (Table 11-3).

With regard to faculty participation, representatives of faculty groups have for some time indicated a strong desire for faculty membership on college councils. The results of this survey do not show strong support for this position. Less than one-third of faculty favoured representation on college councils, with even less enthusiasm on this point being expressed by administrators. In general, faculty opinion favoured representation on college councils from the community, co-operating school boards, college faculty and administration, the provincial government, and college students. Thus, while the community colleges have contributed to the democratization of post-secondary education by serving students who would previously have been unable to continue their formal education, the faculty would push this concept further. They clearly favoured the democratization of the decision making process as represented by the college council. This is further supported by the responses as to how the various representatives should be appointed or elected to the college councils. Their direct appointment was rejected by about 90% of faculty members. Instead, they favoured either election or a combination of election and appointment of representatives.

TABLE 11-3
THE ROLE OF STUDENTS IN FORMULATING COLLEGE POLICIES AS VIEWED BY COLLEGE FACULTY
(Percentages)

| Students' Role | Instructor | Administrator | Support Staff |
|---|---|---|---|
| Should have no role | 5 | 3 | — |
| Should be consulted informally | 27 | 24 | 20 |
| Should sit on committees but have no vote | 14 | 22 | 10 |
| Should be allowed to vote but have less weight than faculty | 20 | 18 | 20 |
| Should possess equal vote | 8 | 12 | 25 |
| Should reach consensus with faculty | 26 | 21 | 25 |
| Total | 100 | 100 | 100 |

Nearly half of faculty favoured the B.C. College Faculties Federation as the organization best suited to represent the broad interests of college faculty. While this support was stronger from academic transfer faculty than others, the C.F.F. was still the most-favoured group. The next most favoured concept was a separate organization for each college. Organizations which are university oriented or public school oriented were essentially rejected, as were labour unions. This is not to be regarded as rejection of the trade union movement per se, as several faculty associations have individually received collective bargaining status from the Department of Labour. Rather, it seemed to indicate that faculty negotiating aims and objectives differed from those of labour unions.

What college faculty seemed to be saying is that they wish to establish an identity of their own, one not to be confused with the university or with the secondary school system.

When asked about administrative decision making, practically all the faculty supported the concept of concerned parties being involved in the decision making process. Almost half of the faculty, however, felt that wide support for a decision is not always necessary, while half said that as far as possible no decision should be made unless all groups affected by it have adequate time to consider the question and to agree on its resolution. As might be expected, administrators were less enthusiastic about broad agreement on decisions than were other faculty members (Table 11-4).

Faculty opinions were clear cut on whether or not to retain "out-of-district" fees for students not residing within the college district. By far the majority of faculty were in favour of eliminating these out-of-district fees, which implies a further broadening of the college base.

With regard to the structure of the academic year, in the junior college movement of the United States preference has been growing for a system where each semester is 4-5 months in duration. About 60% of the U.S. colleges operate on this system, one-third have adopted a quarter system, and only around 3% operate under the trimester system.

TABLE 11-4
THE ADMINISTRATIVE DECISION-MAKING PROCESS AS VIEWED BY COLLEGE FACULTY
(Percentages)

| Administrative decision-making should: | Instructor | Administrator | Support Staff |
|---|---|---|---|
| Preclude discussion with groups affected | 3 | 3 | — |
| Include discussion although wide support is not necessary | 46 | 63 | 40 |
| As far as possible allow adequate time for concerned groups to discuss the question and to agree on its implementation | 51 | 34 | 60 |
| Total | 100 | 100 | 100 |

In British Columbia the colleges also operate on a combination of systems, most involving 2 four-month semesters. Some colleges also offer a summer session of 5 weeks' duration and some offer 2 summer sessions. One college is on the trimester system. Faculty have shown a preference for either the trimester system or a system with 2 four-month semesters and a short summer session. Little support was given for any of the other alternatives (Table 11-5).

Thirteen possible factors were listed in the questionnaire as being potentially important in measuring job satisfaction. Faculty were asked to rate their satisfaction about these in a scale ranging from very high to very low. Receiving major support were: "relations with colleagues," "professional freedom," and "vacation time." Generally, one-quarter of the faculty said these rated very high and a further 40% said they were highly satisfied with these areas. Giving rise to the most dissatisfaction were: "research support and facilities," "opportunity to participate in college governance," and "relations with college council." Approximately 20%

TABLE 11-5
PREFERRED ACADEMIC YEAR STRUCTURE AS VIEWED BY COLLEGE FACULTY
(Percentages)

| Preferred Academic Year | Instructor | Administrator | Support Staff |
|---|---|---|---|
| 8 month/2 month summer session | 14 | 12 | 10 |
| 10 month | 7 | 7 | — |
| 3 semesters of 4 months each (trimester) | 34 | 24 | 49 |
| 2 semesters of 4 months/ short summer session | 26 | 31 | 28 |
| 2 semesters of 5 months | 7 | 11 | 5 |
| 4 quarters of 3 months | 8 | 11 | 3 |
| Other | 4 | 4 | 5 |
| Total | 100 | 100 | 100 |

of the staff rated their satisfaction in these areas as very low, and a further 20% as low. There was a wide range of opinion in all categories; however "security (tenure)," and "number of instructional hours required" seemed to poll a greater than usual spread of votes from very high to very low satisfaction.

## EDUCATIONAL PHILOSOPHY

Perhaps of more direct concern to the *Impact Study* are the views of college faculty members concerning college philosophy.

Most community colleges in British Columbia have adopted a comprehensive, multi-purpose approach to curriculum. Almost all types of post-secondary programs and courses are available at each college (although not necessarily at every campus of a particular college). Hence, a typical B.C. community college will probably offer:

— university transfer courses;
— para-professional or technology programs;
— trade and vocational programs;
— continuing education for adults;
— basic skill and remedial education.

While this mix may be ideal for the two-year college, not all segments of the community agreed with this structure, as was shown in Chapter 10. However, this comprehensive curriculum was supported by 75% of instructors and 85% of administrators. Essentially, none of the faculty supported the concept of the solely academic transfer college.

Consistent with their views regarding curricula, faculty members indicated that the preferred design for community colleges is the major comprehensive centre with a number of satellite centres offering a variety of courses and programs. This is directly in line with the college philosophy. This preference was more pronounced among administrators than among instructors, and more among

academic transfer faculty than among the others. The latter preferred three separate centres, one each for academic transfer, career/technical, and vocational programs. This was only the fourth most popular design according to academic transfer faculty. Rejected by nearly everyone was the concept of an administrative and library centre with courses offered mainly through T.V., cable, radio, or directed studies (Table 11-6).

TABLE 11-6
PREFERRED COMMUNITY COLLEGE DESIGN AS VIEWED BY COLLEGE FACULTY
(Percentages)

| College Design | Job Position | | | Instructional Area | |
|---|---|---|---|---|---|
| | Instructor | Administrator | Support Staff | Academic Transfer | Other Programs |
| Single comprehensive centre | 16 | 11 | 15 | 14 | 18 |
| Comprehensive major centre with small satellite branches | 21 | 16 | 23 | 23 | 18 |
| Major comprehensive centre with a number of minor centres offering appropriate courses and programs | 33 | 44 | 32 | 39 | 26 |
| Three complete centres, one for academic, career/tech., vocational | 20 | 19 | 10 | 12 | 30 |
| An administrative and library centre with courses taught in available facilities throughout the district | 4 | — | 13 | 4 | 4 |
| An administrative and library centre with courses offered mainly through T.V., cable, radio, or directed study | 1 | — | 5 | 1 | 1 |
| Design not listed above | 5 | 10 | 2 | 7 | 3 |
| Total | 100 | 100 | 100 | 100 | 100 |

As has been mentioned in an earlier chapter, most colleges in British Columbia tend to decentralize their facilities throughout the community. However, on this issue faculty were evenly split. Half the faculty favoured a predominantly computer-type college and half favoured the construction of colleges residences where the size of the district warranted it.

Concerning the viewpoint on the over-all objectives of post-secondary education, there is considerable divergence of opinions between the community (as discussed in Chapter 10) and the faculty. Ranking first in preference with nearly one-half the instructional staff and over two-fifths of the administrators was "the learning of skills and habits used in critical and constructive thinking." This was also true for the academic transfer faculty, with 60% ranking this first in preference. However, among faculty members in other program areas, the

foremost objective of post-secondary education was "learning skills that lead to a job." This latter viewpoint is very similar to that expressed by the community. Few faculty members selected either "the attainment of a satisfactory emotional and social adjustment," or "the development of a broad general outlook on a variety of subjects" (Table 11-7).

TABLE 11-7
PRIME OBJECTIVE OF POST-SECONDARY EDUCATION ACCORDING TO COLLEGE FACULTY
(Percentages)

| Objective | Job Position | | | Instructional Area | |
|---|---|---|---|---|---|
| | Instructor | Administrator | Support Staff | Academic Transfer | Other Programs |
| Learning skills that lead to a job | 28 | 34 | 18 | 13 | 49 |
| Learning skills and habits used in critical thinking | 49 | 41 | 56 | 60 | 36 |
| Attaining satisfactory emotional and social adjustment | 10 | 12 | 18 | 10 | 9 |
| Developing broad general outlook on variety of subjects | 13 | 13 | 8 | 17 | 6 |
| Total | 100 | 100 | 100 | 100 | 100 |

Moving from the general objectives to the more specific area of curriculum content, there has been considerable debate over the years as to the role of general education in vocational and career/technical programs. Here, general education refers to broad educational experiences aimed at a student's personal development rather than at contributing to his technical or vocational competence. College faculty agree that there should be some general education included in all program curricula. Academic transfer faculty favour a greater proportion of general education in vocational and career programs than do the faculty directly working in these areas. Over half of the academic transfer faculty said this proportion should be as high as 25% and a quarter said it should be up to 50%. In general, faculty favoured a greater proportion of general education for the content of career/technical programs than vocational programs (Tables 11-8 and 11-9).

TABLE 11-8
COLLEGE FACULTY VIEWS ON *VOCATIONAL* CURRICULUM CONTENT
(Percentages)

| The extent to which general education should be included | Academic Transfer | Other Programs |
|---|---|---|
| No general education required | 6 | 8 |
| Up to 10% general education | 16 | 37 |
| Up to 25% general education | 54 | 44 |
| Up to 50% general education | 24 | 11 |
| Total | 100 | 100 |

TABLE 11-9
COLLEGE FACULTY VIEWS ON *CAREER/TECHNICAL* CURRICULUM CONTENT
(Percentages)

| The extent to which general education should be included | Academic Transfer | Other Programs |
|---|---|---|
| No general education required | 3 | 4 |
| Up to 10% general education | 12 | 22 |
| Up to 25% general education | 56 | 51 |
| Up to 30% general education | 29 | 23 |
| Total | 100 | 100 |

A review of recent literature concerning the two-year college movement indicated growing discussion and controversy concerning the grading of student achievement. In some Canadian colleges, a departure from the standard percentage scale or 5-point letter scale has been tried. In B.C. colleges, discussion concerning the relative merits of various grading methods has followed this national pattern. However, such discussion has usually been the work of selected committees. When faculty at large were surveyed some interesting results emerged.

The single most favoured method of grading was a comprehensive system of letter grades including "plus" and "minus" variations as well as W (withdraw) and I (incomplete). This system was more strongly favoured by administrators and support staff than by instructors. It was the system preferred by faculty for academic transfer courses, and to a lesser extent for career/technical courses. However, for vocational courses the "honours, pass, fail" system was generally preferred over the comprehensive system. Only a small proportion of faculty favoured a system of "no grades at all, but course completed."

One can pursue the idea of grading one step further and ask whether faculty are in favour of colleges developing into degree granting institutions. Such a policy would totally change the original intent of the comprehensive, open door community college philosophy. The results of the survey were rather surprising, with over one-third of all instructors and 40% of academic transfer instructors, being agreeable to the degree granting concept. More of the younger than older age faculty members were in favour of this.

The open door admission policy of B.C. community colleges essentially means that any citizen of the community, irrespective of age, previous level of education or credential, may gain entry to the college. (As was previously pointed out, not all community college courses and programs are open door). Basic entrance requirements may be considered as either negligible or generally low. However, the faculty in general do not consider scholastic entrance requirements as being too low; only 25% of instructors and 15% of administrators thought they were inadequate.

The British Columbia community colleges have been developed on the concept that teaching is the prime responsibility of faculty. Faculty members have been selected with this principle in mind. However, when asked to identify the most important features responsible for bringing a particular faculty member to his particular college, the response "emphasis on instruction" ranked only third in impor-

tance. The most important feature of the college was the "freedom to instruct and perform professional duties," which received votes from two-thirds of the faculty. The "geographic location" of the college was rated as second in importance. There was little difference between the opinions of faculty members in the different program areas on these points (Table 11-10).

Teaching ability, however, was seen by an overwhelming majority of faculty as having high importance in promotion and salary matters, which is in accordance with community college philosophy. Professional qualifications also ranked as an important factor. Considered of medium importance were "research and scholarly or technical ability" and "service to institutions." Ranking low in importance were "community service" and "seniority."

TABLE 11-10
IMPORTANT FEATURES OF COLLEGE AS VIEWED BY COLLEGE FACULTY
(Percentages)[1]

| Most Important Feature Bringing Faculty to College | Academic Transfer | Other Programs |
|---|---|---|
| Sense of community involvement | 30 | 28 |
| Many motivated, hard working students | 17 | 28 |
| Freedom to instruct and perform professional duties | 67 | 68 |
| Salary | 20 | 24 |
| Quality of the faculty | 11 | 10 |
| Emphasis on instruction | 44 | 36 |
| Availability of good facilities and equipment | 4 | 14 |
| Geographical location | 47 | 36 |
| Only position available | 25 | 12 |
| Other | 14 | 18 |

1. Percentages do not total to 100 since faculty members were allowed to mark up to three response options.

When questioned about the procedure of evaluating instructional effectiveness for the purposes of promotion or rehiring, over half the faculty were in favour of having a formal evaluation procedure and only 30% were opposed. This view was held by faculty members from all program areas. Although faculty were not asked how this evaluation should be done, those in favour were asked who should be involved in the procedure. The department or division chairman was selected by half the faculty. Also receiving a large number of votes were "colleagues," "students," and "person at a dean level." Older age faculty were not as favourable to student involvement as were younger faculty.

The B.C. community college system does not have a ranking system for faculty members as do the universities. At the universities, there are ranks such as lecturer, assistant professor and professor. When asked to comment on this concept, over three-quarters of the college faculty were opposed to the establishment of such a system at the colleges. Similarly, they were against the idea of requiring provincial certification of college teachers, although faculty other than in academic transfer programs were only marginally opposed.

Hitherto, the basic requirement for instructional duty in a community college

has been a minimum academic qualification, normally a Master's degree, or in the case of career/technical and vocational instructors, demonstrated competence and experience in a particular area. While there is a requirement of expertise in a subject area, there is no formal requirement of instructional skills. An internship program could be used to correct this. Well over half the faculty were favourable to the internship concept, with administrators and career/technical faculty being more strongly in favour than other faculty members.

However, in spite of these findings, there is no doubt that college faculty believe that students consider the general instructional ability of college faculty as being above that of high school teachers. It should be emphasized here that this was the faculty's belief rather than the actual student viewpoint (Table 11-11).

The college faculty were also asked to select the chief attributes of students who have completed a program or a series of courses at college. Over half the

**TABLE 11-11**
**INSTRUCTIONAL REPUTATION[1] AS VIEWED BY COLLEGE FACULTY**
**(Percentages)**

| Reputation | Job Position | | | Instructional Area | |
|---|---|---|---|---|---|
| | Instructor | Administrator | Support Staff | Academic Transfer | Other Programs |
| Much better | 38 | 43 | 38 | 38 | 35 |
| Somewhat better | 45 | 43 | 57 | 46 | 43 |
| The same | 16 | 12 | 5 | 15 | 18 |
| Somewhat poorer | 1 | 1 | — | 1 | 3 |
| Much poorer | — | 1 | — | — | 1 |
| Total | 100 | 100 | 100 | 100 | 100 |

1. Responses to question: "How would students compare the instructional ability of college faculty with that of secondary school teachers?"

**TABLE 11-12**
**STUDENT ATTRIBUTES AS VIEWED BY COLLEGE FACULTY**
**(Percentages)[1]**

| Attributes | Academic Transfer | Other Programs |
|---|---|---|
| Adequate involvement with ideas | 39 | 38 |
| Ability to work independently | 39 | 66 |
| Concern with political, social, or economic issues | 27 | 14 |
| Critical views of content of college courses | 29 | 15 |
| General mastery of content of college courses | 54 | 50 |
| High in *general* intelligence | 8 | 16 |
| Social maturity | 24 | 38 |
| Prepared to adapt to technological change | 16 | 15 |
| No opinion | 15 | 10 |

1. Percentages do not total to 100 since faculty members were allowed to mark all response options applicable.

faculty said students had a mastery of the course content. Half of the non-academic faculty also indicated that students had the ability to work independently and were prepared to adapt to technological change. Faculty did not, however, attribute high *general* intelligence to students (Table 11-12).

## SUMMARY

In 1973 a survey of college faculty members was conducted as part of the *Impact Study*. Its purpose was to determine the attitudes and opinions of faculty members throughout the province. The views of approximately 50% of all full and part-time faculty were obtained.

College faculties were composed primarily of males over 34 years of age and employed on a full-time basis. Most members had either a Master's or a Bachelor's degree and over half had come from a previous teaching position. The instructors spent more than 15 hours per week in formal student contact and less than 10 hours per week in informal student contact.

Most faculty would like a separate College Act setting down the legislation under which the colleges would operate and most felt that there should be a Deputy Minister assigned to post-secondary education. Faculty favoured broadening the base of college councils by including representatives from the community, school boards, and students. Faculty membership on college councils was supported by less than a third of the faculty. Nearly half the faculty favoured the B.C. College Faculties Federation as the organization best suited to represent them.

Out-of-district fees should be eliminated, according to the majority of faculty. The colleges should offer a comprehensive curriculum and be housed in major centres with some minor satellites offering a variety of courses and programs. Faculty members were evenly split over whether colleges should offer residence accommodation for students.

The majority of faculty cited the prime objective of post-secondary education as learning the skills and habits used in critical thinking. There should be some general education included in all program curricula, with the majority indicating that this should comprise up to 25% of the vocational and career/technical program content.

Faculty supported a comprehensive system of letter grades for the grading of students, and over one-third favoured the idea of colleges becoming degree granting institutions. Teaching ability should have high importance in faculty promotion and a formal faculty evaluation scheme would be desirable. However, faculty opposed the establishment of a system of faculty ranks and provincial certification of college instructors. Some kind of internship program to enhance the instructional skills of faculty members was favoured.

On the whole, college faculty views seem to be consistent with the community college philosophy. They are in favour of comprehensive curricula and the decentralization of facilities to increase accessibility. They also stress the importance of teaching. While not unanimous in their opinions, they certainly appear to support the overall objectives of the community college concept.



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Chapter 12

# SOME FINANCIAL PERSPECTIVES

Educational financing affects most individuals involved in or concerned with education, as well as most decisions and issues in education. Consequently, an examination of the costs and financing of education, and particularly of post-secondary education, is an essential component in this assessment of the impact of community colleges in British Columbia.

This chapter presents an overview of recent trends in educational expenditures in British Columbia and a comparison of costs at the province's post-secondary institutions for the fiscal year 1973-74. These are based on the financial statements of each institution, the Annual Reports of the Department of Education and the Public Accounts of the Province of British Columbia. Private institutions, whose budgets account for 2% of total educational expenditures in B.C., are not included in this discussion.

It should be noted that there are a number of difficulties associated with preparing such an overview which result from inconsistencies inherent in the basic data. These inconsistencies include:

— differences among institutions in defining, allocating and reporting revenues and expenditures;
— the use of three different years: fiscal, academic and calendar;
— differences among institutions in defining full-time, part-time, and full-time equivalent students.

Consequently, to present a uniformly comparable picture, it was necessary to make some inferences and approximations.

## ECONOMIC OUTPUT AND THE COSTS OF GOVERNMENT AND OF EDUCATION

In view of the widespread concern about the rapidly rising costs of education in British Columbia and throughout North America, it is appropriate to relate recent trends in B.C. educational expenditures to the provincial budget and to provincial economic growth.

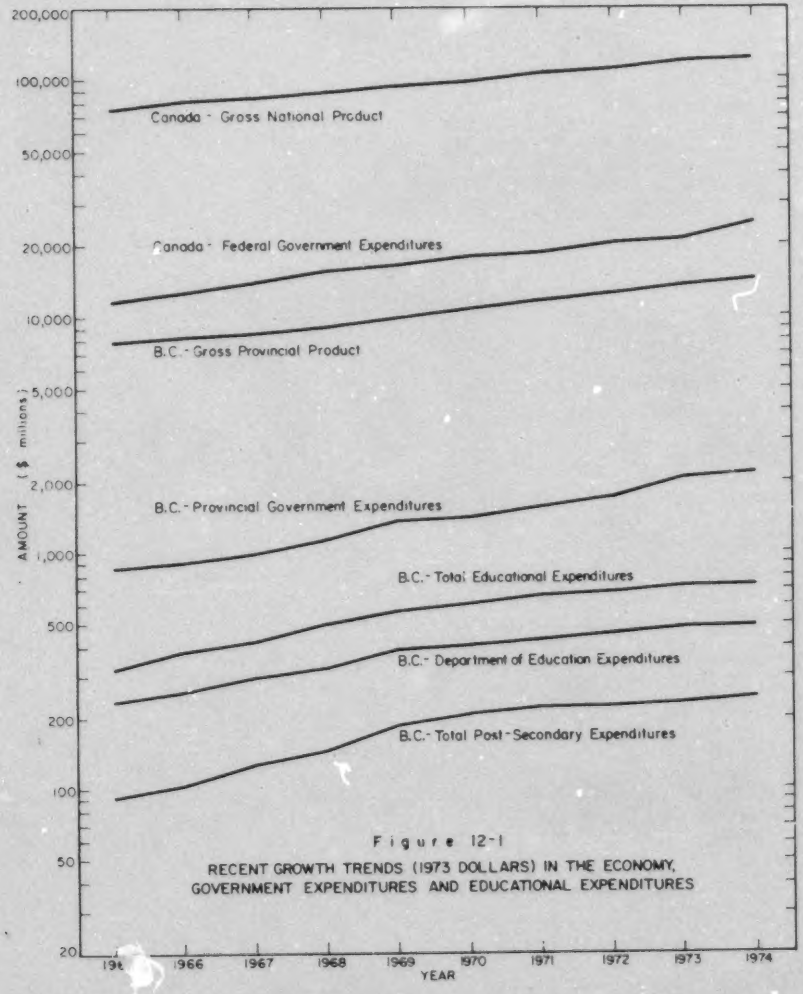



Figure 12-1

RECENT GROWTH TRENDS (1973 DOLLARS) IN THE ECONOMY, GOVERNMENT EXPENDITURES AND EDUCATIONAL EXPENDITURES

## TABLE 12-1
## THE ECONOMY, GOVERNMENT AND EDUCATION

| Year[1] | Consumer Price Index (Vancouver) 1961 = 100 | CANADA | | | | BRITISH COLUMBIA | | | | B.C. EDUCATIONAL EXPENDITURES | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Gross National Product ($ billions) | | Fed. Gov't. Expenditures ($ billions) | | Gross Provincial Product ($ billions) | | Prov. Gov't. Expenditures ($ millions) | | Provincial Government ($ millions) | | Total[2] ($ millions) | |
| | | Amount | 1973 $ | Amount | 1973 $ | Amount | 1973 $ | Amount | 1973 $ | Amount | 1973 $ | Amount | 1973 $ |
| 1965 | 104.5 | 55.4 | 74.7 | 8.5 | 11.5 | 5.8 | 7.9 | 646 | 871 | 175 | 236 | 254 | 342 |
| 1966 | 107.0 | 61.8 | 81.5 | 9.7 | 12.8 | 6.2 | 8.2 | 696 | 917 | 195 | 258 | 292 | 385 |
| 1967 | 111.0 | 66.4 | 84.4 | 11.1 | 14.1 | 6.7 | 8.6 | 781 | 992 | 231 | 293 | 349 | 443 |
| 1968 | 115.1 | 72.6 | 88.9 | 12.7 | 15.6 | 7.5 | 9.2 | 925 | 1,133 | 266 | 326 | 402 | 493 |
| 1969 | 119.0 | 79.8 | 94.6 | 14.1 | 16.7 | 8.5 | 10.1 | 1,154 | 1,368 | 332 | 393 | 482 | 572 |
| 1970 | 123.0 | 85.6 | 98.1 | 15.7 | 18.0 | 9.5 | 10.8 | 1,242 | 1,423 | 361 | 414 | 545 | 625 |
| 1971 | 127.0 | 93.3 | 103.6 | 16.8 | 18.6 | 10.6 | 11.8 | 1,419 | 1,575 | 392 | 435 | 603 | 669 |
| 1972 | 132.1 | 103.5 | 110.5 | 19.4 | 20.7 | 11.9 | 12.7 | 1,621 | 1,730 | 434 | 463 | 653 | 696 |
| 1973 | 141.0 | 118.9 | 118.9 | 21.7 | 21.7 | 13.8 | 3.8 | 2,096 | 2,096 | 494 | 494 | 736 | 736 |
| 1974 | 157.4 | 140.0 | 125.0 | 28.0 | 25.0 | 16.0 | 4.5 | 2,500 | 2,250 | 560 | 500 | 840 | 750 |

1. Calendar year or fiscal year commencing April 1.
2. Excludes private institutions which are estimated to account for 2% of the total.
3. Estimated.

Table 12-1 compares B.C.'s educational expenditures with provincial and national economic output and government expenditures since 1965. In order to remove the apparent-growth component resulting from inflation, the data are expressed also in terms of 1973 dollars, the basis of the adjustment being Statistics Canada's Consumer Price Index for Vancouver. The data from Table 12-1 are shown graphically in Figure 12-1 and average growth rates over the 10-year period from 1965 to 1974 are summarized in Table 12-2.

Expenditures in post-secondary education have shown the greatest increase among the areas shown, averaging a 10.5% annual compound growth rate. Total educational expenditures in B.C. grew at a rate of 8.2%, which is considerably faster than the 6.3% annual growth rate of the provincial economy.

The foregoing figures also illustrate the rapid growth of government expenditures at both the national and provincial levels. In 1965, federal government expenditures represented 15.5% of the Gross National Product and B.C. government expenditures 11% of the Gross Provincial Product. In ten years, both of these figures have increased by 4.5% so that the comparable 1974 figures are 20% and 15.5% respectively.

TABLE 12-2

1965-1974 GROWTH RATES[1] OF THE ECONOMY, GOVERNMENT SPENDING AND EDUCATIONAL SPENDING

(Percentages)

| | NET GROWTH 1965-74 | |
|---|---|---|
| | 10-year Total | Annual Rate |
| CANADA | | |
| Gross national product | 67 | 5.3 |
| Federal government expenditures | 117 | 8.1 |
| BRITISH COLUMBIA | | |
| Gross provincial product | 84 | 6.3 |
| Provincial government expenditures | 158 | 10.0 |
| Total educational expenditures | 119 | 8.2 |
| Department of Education expenditures | 112 | 7.8 |
| Post-secondary educational expenditures | 172 | 10.5 |

1. Corrected for inflation using 1973 dollars as the base.

## SOURCES OF EDUCATIONAL FINANCE IN BRITISH COLUMBIA

There are some fundamental differences in the way in which the major educational sectors are financed in British Columbia. This is clear from Table 12-3 which shows the total expenditures and principal sources of revenue in each sector from 1965 to 1973 and from Table 12-4 which shows the proportion of financing from each source in each sector in 1973-74.

In the public school system, the funds required in each school district are obtained from provincial grants and from local property taxation. A small proportion is obtained from provincial grants and from local property taxation. With respect to operating expenses, the provincial grant is equal to the difference between the amount which can be raised locally by a basic levy on property (which is uniformly

TABLE 12-3

EDUCATIONAL EXPENDITURES[1] AND SOURCES OF REVENUE IN BRITISH COLUMBIA ($MILLIONS)

| | 1965[2] | 1966 | 1967 | 1968 | 1969 | 1970 | 1971 | 1972 | 1973 |
|---|---|---|---|---|---|---|---|---|---|
| PUBLIC SCHOOLS | | | | | | | | | |
| Direct government grants | 77.5 | 89.6 | 97.2 | 116.6 | 129.3 | 150.5 | 171.4 | 187.9 | 217.9 |
| Home-owner grants | 29.1 | 33.1 | 37.3 | 41.6 | 51.4 | 54.3 | 59.6 | 70.2 | 80.0 |
| District taxation | 72.7 | 83.6 | 105.8 | 118.6 | 127.8 | 142.5 | 150.1 | 160.2 | 176.6 |
| Tuition fees & miscellaneous | 6.3 | 7.9 | 7.7 | 8.9 | 15.6 | 15.9 | 20.0 | 20.2 | 28.2 |
| Total | 185.6 | 214.2 | 248.0 | 285.7 | 324.1 | 363.2 | 401.1 | 438.5 | 502.7 |
| COLLEGES[3] | | | | | | | | | |
| Direct government grants | — | — | — | — | 6.1 | 8.8 | 13.5 | 15.9 | 20.0 |
| District taxation | — | — | — | — | 1.7 | 3.4 | 5.9 | 6.9 | 7.7 |
| Tuition fees & miscellaneous[3] | — | — | — | — | 1.2 | 1.9 | 2.9 | 3.5 | 4.2 |
| Total | — | — | — | — | 9.0 | 14.1 | 22.3 | 26.3 | 31.9 |
| TECHNICAL & VOCATIONAL | | | | | | | | | |
| Government capital grants | 21.5 | 19.5 | 9.6 | 5.6 | 13.2 | 10.0 | 6.0 | 5.7 | 6.3 |
| Government operating grants | 6.9 | 8.4 | 8.8 | 11.0 | 13.5 | 15.9 | 18.1 | 16.3 | 19.1 |
| Tuition fees & miscellaneous[3] | 2.4 | 2.9 | 3.0 | 3.8 | 4.7 | 5.5 | 6.3 | 5.6 | 6.6 |
| Total | 30.8 | 30.8 | 21.4 | 20.4 | 31.4 | 31.4 | 30.4 | 27.6 | 32.0 |
| UNIVERSITIES | | | | | | | | | |
| Government capital grants | 8.0 | 8.0 | 8.0 | 12.0 | 15.0 | 15.0 | 14.0 | 14.0 | 11.0 |
| Government operating grants | 19.2 | 25.8 | 46.7 | 55.1 | 67.4 | 79.6 | 88.5 | 95.9 | 104.0 |
| Tuition fees & miscellaneous[4] | 10.1 | 13.5 | 24.5 | 28.9 | 35.4 | 41.8 | 46.5 | 50.3 | 54.6 |
| Total | 37.3 | 47.3 | 79.2 | 96.0 | 117.8 | 136.4 | 149.0 | 160.2 | 169.6 |
| Post-secondary Total | 68.1 | 78.1 | 100.6 | 116.4 | 158.2 | 181.9 | 201.7 | 214.1 | 233.5 |
| Grand Total | 253.7 | 292.3 | 348.6 | 402.1 | 482.3 | 545.1 | 602.8 | 652.6 | 736.2 |

1. Excludes private institutions which are estimated to account for about 2% of the total.
2. In this and subsequent columns, fiscal year commencing April 1.
3. Explicit data and breakdown not available before 1969.
4. Estimates.

applied in all districts) and the cost of a district's basic educational program. Expenditures in excess of the basic program are met from local taxation. Supplementary grants may be made at the discretion of the Minister of Education.

Capital expenditures in each district are financed by the issue and sale of government guaranteed debentures through the British Columbia School Districts Capital Financing Authority. The Province makes grants to each school district in respect of approved capital expenditures of not less than 50% of annual principal and interest payments. The provincial share increases to a maximum of 90% for that portion of the local cost which exceeds 3 mils. On the average, capital and interest repayments account for 10% of school district costs.

Since 1968 there has been a gradual reduction in the local share of public school financing from 41% to 35% in 1973-74. During the same period, total government grants increased from 55% to 59% and revenue from tuition fees and miscellaneous sources from 3% to 5%.

**TABLE 12-4**
**PROPORTION OF FINANCING IN EACH EDUCATIONAL SECTOR ACCORDING TO SOURCE (1973-74)**
**(Percentages)**

| | Public Schools | Colleges | Technical Vocational | Universities | Total | |
|---|---|---|---|---|---|---|
| | | | | | Distribution | Amount ($ millions) |
| Provincial gov't grants | | | | | | |
| - capital | — | — | 19.7 | 6.5 | 2.4 | 17.3 |
| - operating | 43.4 | 62.7 | 59.7 | 61.3 | 49.0 | 361.0 |
| - home-owner | 15.9 | — | — | — | 10.9 | 80.0 |
| Total | 59.3 | 62.7 | 79.4 | 67.8 | 62.3 | 458.3 |
| Local property taxes | 35.1 | 24.1 | — | — | 25.0 | 184.3 |
| Tuition fees & misc. | 5.6 | 13.2 | 20.6 | 32.2 | 12.7 | 93.6 |
| Distribution by sector | 68.4 | 4.3 | 4.3 | 23.0 | 100.0 | — |
| Total ($ millions) | 502.7 | 31.9 | 32.0 | 169.6 | — | 736.2 |

In addition to direct educational grants to school districts, the province provides for an annual grant on behalf of resident home-owners. This is applied as a rebate on the current year's school taxes and in 1974 amounted to $200 to each eligible home-owner, with an additional $50 to those over the age of 65. The proportion of school district financing accounted for by the home-owner grant has remained constant at 15%-16% during the past few years.

Provisions for the financing of colleges are similar to those of public schools. The annual provincial grant for the operating expenses of each college is not less than 60% of the approved essential operating expenses. The remaining 40% are met from local property taxation and tuition fees. The annual grant for the capital expenses of each college is 100% of the principal and interest payments on debt for approved capital expenditures. At the start of the college movement in B.C. in 1965, the capital costs of colleges were shareable 60% by the province and 40% by

the participating school districts, subject to approval by local referenda. Selkirk College was built according to this formula. However, partly as a result of difficulties in passing local referenda, and partly to reduce local tax burdens, the original formula was altered.

In 1973-74, 63% of college financing was obtained from provincial grants, 24% from local property taxes and 13% from tuition fees and miscellaneous sources. This distribution has not changed significantly since 1970.

The financing of vocational schools, technical institutes and universities is similar in that they all receive capital and operating grants from the province and are not dependent on local financing. A much larger proportion of their income is from tuition fees and miscellaneous sources (in the case of universities this includes research) than is the case for colleges.

In 1973-74, the province provided almost 68% of the financing of universities, down slightly from about 70% in 1968. The province provided about 80% of the financing of vocational schools and technical institutes in 1973-74, which is essentially the same as in preceeding years.

It should be noted that under the Federal-Provincial Fiscal Arrangements Act of 1967, the federal government contributes the equivalent of 50% of the operating costs of post-secondary education in Canada, subject to a minimum of $15 per capita to each province and a maximum 15% annual increase in the total federal contribution. The larger portion of the contribution is in the form of a federal tax reduction in favour of each province and the balance is an adjustment payment representing the difference between the provincial entitlement and the tax reduction. In 1973-74, British Columbia received $64.9 million in the form of a tax transfer and $13.1 million in the form of a cash transfer, a total of $78.1 million.

In addition, Canada's Department of Manpower and Immigration purchases seats in vocational-technical programs of less than one year's duration under the Adult Occupational Training Act. In recent years, 50%-60% of the vocational training days provided in B.C. colleges and vocational schools have been filled by Manpower-sponsored students. In 1973-74, Canada Manpower's purchases of training totalled $18.2 million in the province.

## ALLOCATION OF EDUCATIONAL RESOURCES AMONG THE DIFFERENT EDUCATIONAL SECTORS

The information in Table 12-3 showed that there has been a gradual increase in the post-secondary sector's share of educational resources from 27% in 1965 to 32% in 1973. The share of the universities rose from 15% to 23% and that of the colleges from zero to 4½%. While the total share of the vocational/technical sector was 12% in 1965 compared to only 4½% in 1973, the former figure was inflated by the capital cost of constructing new facilities, including the B.C. Institute of Technology, in the mid-'sixties. Excluding capital grants, the share of the vocational/technical sector has remained fairly steady at 3½%, while that of the universities doubled from 11% to 22%.

Figure 12-2 is a graphical representation of the distribution of educational resources and full-time enrolments between the major educational sectors, and also shows the relative share of resources provided by the major sources of educational funds.

Figure 12-3 shows the distribution of full-time enrolments between educational sectors from 1967 to 1974. While the share of the vocational schools and technical institute has remained relatively stable near 20%, the universities share of total post-secondary enrolments has declined from 75% in 1967-68 to 57% in 1974-75. Full-time community college enrolments increased five-fold during this period, to account for 24% of full-time post-secondary enrolments in 1974-75.

Figure 12-2
RELATIVE ENROLMENTS, COSTS AND SOURCES OF FUNDS
IN THE BRITISH COLUMBIA EDUCATIONAL SYSTEM

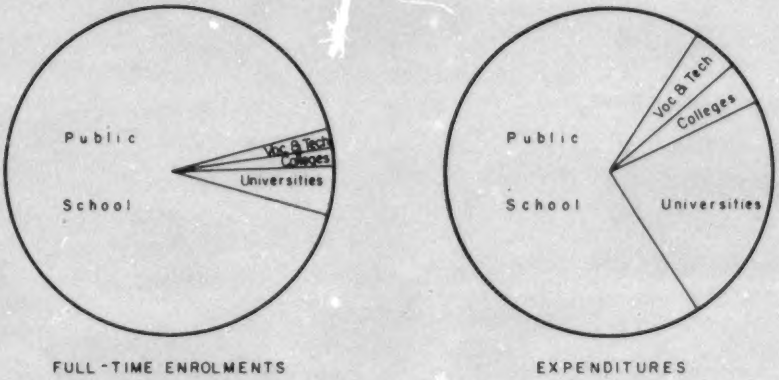
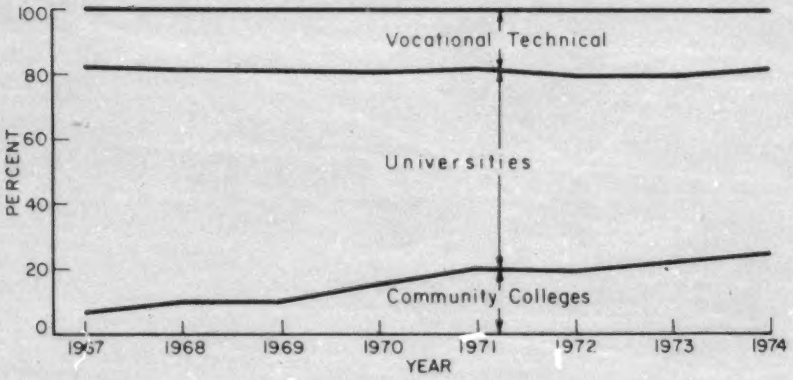


Figure 12-3

DISTRIBUTION OF FULL-TIME ENROLMENTS
IN MAJOR POST-SECONDARY SECTORS




## ENROLMENT, EXPENDITURE AND REVENUE BY EDUCATIONAL SECTOR AND INSTITUTION

A comparison of enrolments, costs and revenues in the major post-secondary sectors and the institutions within them is of considerable interest. Table 12-5 shows the enrolments, instructional costs and total costs at British Columbia's colleges, universities and technical institute.

In order to provide a means of comparing institutions of different type and size, the costs are also given on a "per full-time equivalent student" (F.T.E.) basis. It should be remembered that there are no generally accepted ways of relating part-time and full-time students, or even of comparing full-time students taking different programs. However, some approximations can be made, and on the basis of comparing the course loads of full-time and part-time students, it was found that a reasonable rule of thumb is that three part-time students are roughly equivalent to one full-time student. At the B.C. Institute of Technology, where most part-time students are taking a night-school program, a ratio of 4:1 was judged to be more appropriate.

Table 12-6 shows the enrolments and operating costs of vocational schools and of the vocational divisions of colleges. The full-time equivalent enrolment figure is an estimate of the number of individuals who would be accommodated for training at a particular institution at a given point in time. This figure is comparable to the full-time equivalent enrolment at other post-secondary institutions. Since vocational courses are often short, generally ranging from a few weeks to one year, the common measures of vocational enrolment (training days and course enrolments) are not directly comparable to enrolments in other post-secondary institutions.

Table 12-7 shows the sources of revenue and allocation of expenditures of British Columbia's colleges, technical institute and universities. In most cases, total revenues and total expenditures are in close balance; hence, for simplicity, only the

total expenditures are shown, with the breakdowns of revenues and expenditures expressed as percentages of the total.

Surpluses from the previous or the current fiscal year are not included in the revenue or expenditure figures, nor are ancillary operations such as bookstores. The latter are generally "break-even" operations.

The "Plant Operation etc," category includes the costs of operating and maintaining facilities at each institution, as well as debt services (in the case of colleges) and capital expenditures (in the case of universities). As was explained earlier, the capital expenditures of colleges are financed through borrowing and those of universities by capital grants. The capital expenditures of the universities normally represent a fairly stable proportion of their total budgets. Consequently, it was considered reasonable to include these as part of the costs of their operation. In the case of the colleges, which have much smaller budgets than the universities, the proportion of capital to operating expenditures can vary greatly from year to year. Including the cost of debt services (repayments of principal and interest on long-term capital borrowing) in their operating costs provides, therefore, a suitable "average" means of accounting for capital expenditures.

**TABLE 12-5**
**A COMPARISON OF ENROLMENTS AND COSTS IN BRITISH COLUMBIA'S COLLEGES,[1] TECHNICAL INSTITUTE AND UNIVERSITIES (1973-74)**

| Institution | Enrolment | | | | Instructional Cost | | Total Cost | |
|---|---|---|---|---|---|---|---|---|
| | Full-Time | Part-Time | Total | F.T.E.[2] | Total ($ '000) | $/F.T.E. | Total ($ '000) | $/F.T.E. |
| COLLEGES[1] | | | | | | | | |
| Camosun | 921 | 640 | 1,561 | 1,134 | 1,763 | 1,555 | 2,571 | 2,267 |
| Capilano | 1,048 | 857 | 1,905 | 1,334 | 1,365 | 1,023 | 2,857 | 2,157 |
| Cariboo | 438 | 445 | 883 | 586 | 1,010 | 1,724 | 1,678 | 2,863 |
| Douglas | 1,434 | 1,618 | 3,052 | 1,973 | 2,977 | 1,509 | 5,683 | 2,880 |
| Malaspina | 603 | 946 | 1,549 | 918 | 1,355 | 1,476 | 2,351 | 2,561 |
| New Caledonia | 362 | 698 | 1,060 | 595 | 883 | 1,484 | 1,620 | 2,723 |
| Okanagan | 613 | 340 | 953 | 726 | 1,115 | 1,536 | 1,799 | 2,478 |
| Selkirk | 483 | 188 | 671 | 546 | 1,147 | 2,101 | 1,892 | 3,465 |
| Vancouver (Langara Campus) | 3,174 | 1,220 | 4,394 | 3,580 | 3,713 | 1,037 | 5,730 | 1,600 |
| Total | 9,076 | 6,952 | 16,028 | 11,392 | 15,328 | 1,345 | 26,181 | 2,298 |
| TECHNICAL INSTITUTE | | | | | | | | |
| B.C.I.T. | 3,027 | 4,607 | 7,634 | 4,180 | 6,354 | 1,520 | 9,065[3] | 2,169 |
| UNIVERSITIES | | | | | | | | |
| U.B.C. | 18,745 | 1,997 | 20,742 | 19,411 | 58,278 | 3,002 | 105,529 | 5,437 |
| Simon Fraser | 5,007 | 1,113 | 6,120 | 7,273 | 14,823 | 2,038 | 26,715 | 3,673 |
| Victoria | 4,601 | 950 | 5,551 | 4,918 | 12,118 | 2,464 | 23,711 | 4,821 |
| Total | 28,353 | 4,060 | 32,413 | 31,602 | 85,219 | 2,697 | 155,955 | 4,935 |
| Grand Total | 40,456 | 15,619 | 56,075 | 47,174 | 106,901 | 2,266 | 191,201 | 4,053 |

1. Academic and career/technical only (vocational divisions excluded).
2. According to a general rule of thumb, 3 part-time students are equivalent to 1 full-time student. At B.C.I.T., where almost all part-time students are enrolled in the Extension Division (night school), a ratio of 4:1 is assumed.
3. Excluding capital expenditures.

The whole subject of capital expenditures and debt services is a rather hazy one. Some colleges were, in effect, "given" existing facilities by their participating school districts or by the Department of Education, (e.g., secondary schools or vocational school buildings), while others received provincial and school district grants to construct facilities. Consequently, for some colleges the debt service costs they incur are not an accurate reflection of the cost of their facilities. For example, Selkirk College and Vancouver Community College did not incur debt charges in 1973-74. Nevertheless, it was considered preferable to include as part of operating costs the capital and debt charges incurred, rather than leave them out or try to impute a figure based on the assessed value of facilities.

A particular difficulty arises in the case of vocational schools or the technical institute which receive capital grants. As in the case of the colleges, these can be substantial compared to operating costs in a particular year. On the other hand, since these are grants, the long-term averaging of capital expenditures through debt repayment does not take place. Consequently, in Tables 12-5, 12-6, 12-7, capital expenditures for vocational schools and the technical institute have not

**TABLE 12-6**
**A COMPARISON OF ENROLMENTS AND COSTS IN THE VOCATIONAL DIVISIONS OF COLLEGES AND IN VOCATIONAL SCHOOLS IN BRITISH COLUMBIA (1973-74)**

| Vocational Institution | Enrolment | | | Total Cost[1] | | |
|---|---|---|---|---|---|---|
| | Training Days ('000) | Course Enrol's | F.T.E.[2] | Total ($'000) | $/F.T.E. | $/Day |
| VOCATIONAL DIVISIONS OF COLLEGES | | | | | | |
| Camosun | 132 | 2,600 | 700 | 1,657 | 2,367 | 12.55 |
| Cariboo | 69 | 1,200 | 350 | 1,183 | 3,380 | 17.14 |
| Malaspina | 107 | 2,500 | 800 | 1,715 | 2,144 | 16.03 |
| New Caledonia | 63 | 1,500 | 330 | 985 | 2,985 | 15.63 |
| Okanagan | 88 | 2,300 | 400 | 1,123 | 2,808 | 12.76 |
| Selkirk | 61 | 1,000 | 350 | 804 | 2,297 | 13.18 |
| Vancouver[3] | 336 | 8,100 | 1,450 | 3,775 | 2,603 | 11.24 |
| VOCATIONAL SCHOOLS | | | | | | |
| Burnaby | 297 | 9,700 | 1,500 | 3,534 | 2,356 | 11.90 |
| Dawson Creek | 41 | 700 | 210 | 929 | 4,424 | 22.66 |
| Terrace | 46 | 1,500 | 230 | 888 | 3,861 | 19.30 |
| Total | 1,240 | 31,100 | 6,320 | 16,593 | 2,625 | 13.38 |

1. Excluding capital expenditures
2. Estimated number of students that could be handled on a full-time basis
3. Vancouver Vocational Institute only

been included. In recent years, capital grants to the vocational schools and technical institute have amounted to 20% of the total expenditures in that sector; thus, to account for capital expenditures, their costs as shown in the preceding tables should be increased by about 25%.

Figure 12-4 shows the average cost and the range of cost per student in the major educational sectors. The average cost (arrow) of the vocational schools and technical institute has been increased by 25% over that in Tables 12-5, 12-6, 12-7 to take into account capital expenditures.

The foregoing tables and figures indicate that while there is a wide variation in the total cost per student at different institutions within the various sectors of post-

TABLE 12-7

SOURCES OF REVENUE AND ALLOCATION OF EXPENDITURES IN BRITISH COLUMBIA'S COLLEGES,[1] TECHNICAL INSTITUTE AND UNIVERSITIES (1973-74)

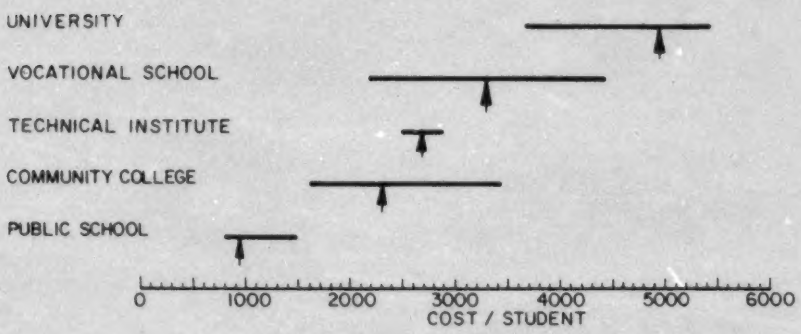
(Percentages)

| Institution | Sources of Revenue | | | | | Allocation of Expenditures | | | | | Total Expenditure ($ '000) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Gov't. Grant | Local Taxation | Tuition Fees | Research | Other | Instruction[4] | Library & Student Services | Plant Operation etc. | Research | Administration[4] | |
| COLLEGES[1] | | | | | | | | | | | |
| Camosun | 51.5 | 17.9 | 22.2 | — | 8.4 | 68.6 | 14.8 | 10.1 | — | 6.5 | 2,571 |
| Capilano | 61.3 | 28.3 | 9.5 | — | 0.9 | 47.8 | 14.4 | 24.3 | — | 13.5 | 2,857 |
| Cariboo | 56.4 | 27.1 | 15.1 | — | 1.4 | 60.2 | 9.9 | 23.5 | — | 6.4 | 1,678 |
| Douglas | 55.7 | 34.3 | 8.2 | — | 1.8 | 52.4 | 13.9 | 26.2 | — | 7.5 | 5,683 |
| Malaspina | 60.9 | 29.1 | 9.8 | — | 0.2 | 57.7 | 16.6 | 16.9 | — | 8.8 | 2,351 |
| New Caledonia | 55.2 | 33.5 | 9.7 | — | 1.6 | 54.5 | 15.4 | 18.2 | — | 11.9 | 1,620 |
| Okanagan | 54.8 | 32.7 | 12.5 | — | 0.0 | 62.0 | 10.3 | 18.1 | — | 9.6 | 1,799 |
| Selkirk | 62.3 | 29.5 | 7.6 | — | 0.6 | 60.6 | 14.4 | 14.8[2] | — | 10.2 | 1,892 |
| Vancouver (Langara Campus) | 65.2 | 21.3 | 12.5 | — | 1.0 | 64.8 | 11.7 | 11.3[2] | — | 12.2 | 5,730 |
| Total | 58.8 | 27.7 | 11.7 | — | 1.8 | 58.5 | 13.4 | 18.4 | — | 9.7 | 26,181 |
| TECHNICAL INSTITUTE B.C.I.T. | 86.0 | — | 10.6 | — | 3.4 | 70.1 | 6.8 | 17.2 | — | 5.9 | 9,065[3] |
| UNIVERSITIES | | | | | | | | | | | |
| U.B.C. | 62.0 | — | 9.6 | 13.7 | 14.7 | 55.1 | 9.1 | 19.4 | 13.1 | 3.3 | 105,529 |
| Simon Fraser | 81.2 | — | 9.0 | 4.6 | 5.2 | 55.5 | 14.5 | 14.7 | 5.4 | 9.9 | 26,715 |
| Victoria | 78.9 | — | 10.0 | 5.9 | 5.2 | 51.5 | 12.0 | 24.1 | 5.9 | 6.9 | 23,711 |
| Total | 67.9 | — | 9.5 | 10.9 | 11.u | 54.6 | 10.4 | 19.3 | 10.7 | 5.0 | 155,955 |
| Grand Total | 67.5 | 3.6 | 9.8 | 9.0 | 10.1 | 55.8 | 10.7 | 19.1 | 8.7 | 5.7 | 191,201 |

1. Academic and career/technical programs only (vocational divisions excluded).
2. College incurs no debt services.
3. Excluding capital expenditures.
4. At some institutions certain expenditures (e.g. personnel such as deans of instruction, and some instructional support services) included under the heading of "administration" in financial statements could more appropriately be allocated to "instruction" or "student services." This is a matter of definition in accounting and financial reporting systems, which are not uniformly consistent in this respect.

Figure 12-4

AVERAGE COST AND RANGE OF COST/STUDENT
BY EDUCATIONAL SECTOR




secondary education, there are marked differences between sectors. Thus, the average annual cost of educating a student at university is nearly $5,000, compared to $2,300 at the colleges. Comparable costs at the technical institute and vocational schools are $2,700 and $3,300 respectively.

Compared to other post-secondary institutions, universities tend to spend a somewhat smaller proportion of their budgets on instruction (55% vs 60%) and administration (5% vs 10%); on the other hand, they spend about 10% on research.

For most post-secondary institutions, tuition fees account for about 10% of their revenue. Direct government grants account for close to 60% of the revenue of colleges, 70% of the revenue of universities and over 80% of the revenue of vocational schools and the technical institute. Local taxation provides 30% of the revenue of colleges; as stated earlier, other post-secondary sectors do not derive revenue from this source.

A comparison of the major divisions of a comprehensive community college is of considerable interest in any examination of the financial aspects of community college operations. Vancouver Community College offers a particularly good example in this respect, being a large, comprehensive, multi-campus institution. Its Langara Campus offers academic, career, technical and university transfer programs, and is comparable to the traditional junior or community college. Its Vancouver Vocational Institute Campus offers a wide range of vocational programs, and its Vancouver School of Art offers two to four-year programs in fine and applied arts. The Special Programs Division offers primarily pre-college, basic skills, and English language training. The Community Education Services division offers a variety of day and evening, credit and non-credit courses, all part-time. Table 12-8 shows a comparison of costs and revenues in the five divisions. These contain an element of approximation, resulting from the fact that certain figures which are not usually accounted for on a divisional basis were prorated among them.

It may be seen from Table 12-8 that there are substantial differences in the costs per full-time equivalent student among the various divisions. On a full-time equivalent basis, costs range from $2,600 per student per year in the Vocational In-

TABLE 12-8

SOURCES OF REVENUE AND ALLOCATION OF EXPENDITURES[1] IN THE DIVISIONS OF VANCOUVER COMMUNITY COLLEGE (1973-74)
(Percentages)

| Divisions of Vancouver Community College | Sources of Revenue | | | | Allocation of Expenditures | | | | Total Expenditure ($ '000) | Enrolment (F.T.E.) | Cost ($/F.T.E.) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Gov't Grant | Local Taxation | Tuition Fees | Other | Instruction | Library & Student Services | Plant Operation etc. | Administration[4] | | | |
| Langara | 65.2 | 21.3 | 12.5 | 1.0 | 64.8 | 11.7 | 11.3 | 12.2 | 5,730 | 3,580 | 1,600 |
| Vancouver Vocational Institute | 95.2 | — | 4.2 | 0.6 | 70.9 | 1.8 | 17.1 | 10.2 | 3,775 | 1,450 | 2,603 |
| Vancouver School of Art | 89.1 | — | 10.4 | 0.5 | 70.0 | — | 13.4 | 16.6 | 888 | 400 | 2,220 |
| Special Programs Division | 59.6 | 21.3 | 18.6 | 0.5 | 77.4 | 4.1 | 8.2 | 10.3 | 2,435 | 1,870[2] | 1,305 |
| Community Education Services | 16.8 | 21.3 | 61.4 | 0.5 | 77.1 | — | 7.5 | 15.4 | 590 | 800 | 738[3] |
| Total | 72.1 | 13.9 | 13.3 | 0.7 | 69.7 | 6.3 | 12.3 | 11.7 | 13,418 | 8,100 | 1,657 |

1. Some items of expenditure and revenue (e.g., cost of executive offices, certain operating costs, revenue from local taxation) are difficult to allocate to individual divisions. For the purpose of this example, such figures were prorated among divisions on the basis of their expenditures as published in the annual financial statement.
2. Based on a head-count of 2,800, and assuming half the students are full-time and half part-time.
3. This division offers only short, part-time courses.
4. See Table 12-7, footnote 4.

stitute through $1,600 at the Langara Campus to about $700 in Community Education. The cost in the School of Art is $2,200, somewhat below vocational costs, and $1,300 in Special Programs, which is somewhat less than the traditional college program at Langara.

Instructional costs account for about 75% of the costs of the Special Programs and Community Education divisions, and 70% at the Vocational Institute and Art School. The figure at Langara is 65% which, as was seen from Table 12-7, is in line with other community colleges. This lower figure is largely due to the cost of the library and student services provided at Langara; some of these services are also used by students from other divisions.

On the revenue side, the Community Education division is the most "self-supporting," with 60% of its income being from tuition fees. This is in sharp contrast to the 4% figure at the Vocational Institute and the roughly 15% figure at the remaining divisions.

## SUMMARY

Expenditures in post-secondary education in British Columbia have grown at an annual rate of 10.5% (net of inflation) since the mid 'sixties. By comparison, total educational expenditures grew at a rate of 8.1% and the provincial economy at a rate of 6.3%.

There are some fundamental differences in the way in which the major educational sectors are financed in British Columbia. Public schools and community colleges are financed largely from provincial government grants and from local property taxes. Universities, technical and vocational schools receive government grants, but no revenue from local taxation. A much larger proportion of their income, especially in the case of universities, is from tuition fees and miscellaneous sources than is the case for colleges.

The costs of education vary widely between different types of institutions, between institutions of the same type, and between programs in the same institution. In 1973-74, the average annual cost per student (full-time) was $5,000 at university, $3,300 at vocational school, $2,700 at technical institute, $2,300 at community college and $950 in public school. Instructional costs account for about 60% of the costs of post-secondary education, and 67% of the costs of public school education.

Government grants account for 62% of educational revenue in British Columbia, local property taxes for 25% and tuition fees and miscellaneous sources for 13%. The federal government contributes substantially toward the costs of post-secondary education in each province. In 1973-74, about 47% of post-secondary expenditures were federally financed, 71% of this amount being in the form of a "tax transfer." Of the cash portion, 58% represented the purchase of vocational-technical training by Canada Manpower.

Chapter 13

# RESEARCH METHODOLOGY

This chapter is concerned with the research methodology used in the study on the *Impact of Community Colleges*. The various steps that were taken will be discussed and the advantages and short-comings of the different approaches reviewed. The purpose of this chapter is to present a detailed description, a set of "how to" instructions, which will assist others in undertaking similar research.

The chapter has been divided into several sections. First, the overall design of the study will be discussed, with a description of how to initiate and plan a study. Next, the various methods of data collection will be reviewed and one of these methods, the questionnaire, will be examined in detail. Then some data processing considerations will be reviewed and finally some recommendations made.

However, before looking at the various aspects of designing a study of this kind, there is one very important item that cannot be over emphasized. This is the need for co-operation from the many agencies and groups involved in the educational system. Before any research was undertaken, an understanding of co-operation was obtained from the Department of Education, the colleges, universities, vocational schools, the technical institute, faculty associations, (including the College Faculties Federation and the Society of Vocational Instructors), some of the student associations, and the Academic Board for Higher Education in British Columbia. This last group is an advisory board, established under the Universities Act, charged with the general supervision of college programs. These relationships were established at the outset of the study because without the active interest and involvement of many of these groups the study would have been impossible to carry out.

## THE STUDY DESIGN

In undertaking a study of this kind, it is important and necessary to spend a considerable amount of time and effort in the design of the study. Before getting involved in the details of a particular survey or in the analysis of the data, the overall objectives of the study must be clearly established.

Once the objectives have been defined, they must be carefully examined. What are the sources of essential data? How can these be collected? These questions must be both asked and answered in order to properly plan the study. When this has been done, surveys and data collection can proceed with the assurance that they are all leading to the same goal.

In the *Impact Study* objectives were defined at the beginning. These objectives were to assess the impact of community colleges from three broad points of view:

1) The Student — what types of students attend community colleges, how do they differ from those attending other post-secondary institutions, how do their achievements compare, what are their needs and expectations, . . . ?

2) The Community — how effective are community colleges in meeting local and provincial needs for various types of training and education, . . . ?

3) The Educational System — how does enrolment in community colleges affect enrolment in other post-secondary institutions, what are the costs and benefits of community colleges relative to those of other institutions, in what respects can community colleges be expected to grow, . . . ?

In order to assess the impact of community colleges on the students it was necessary to collect academic records and transcripts, to assess their academic ability, and to describe their socio-economic background, opinions, viewpoints and expectations. These data were required from both college students and from those attending other post-secondary institutions to permit comparisons to be made.

To assess the impact on the community, opinions and viewpoints were needed from both employers and the general public. A socio-economic description of the community was also required. For the impact on the educational system, data pertaining to enrolments and costs had to be collected, together with information about faculty and administrators.

These data could be obtained from academic and financial records of the post-secondary institutions; from extensive surveys of students, faculty, the business community, and the community at large; and from Canadian census data. Having established these needs, a plan of action could be formulated.

These objectives and study requirements were formulated in direct consultation with the various groups involved in the educational system in British Columbia. Their active participation in several workshop sessions helped to clarify the direction of the study and to review the details of questionnaire design, content and administration.

## DATA COLLECTION

With the objectives of the study established and the sources of data identified, appropriate methods of collecting the information were selected. Data collection methods can range from computer access of a large data base to informal discussions and interviews. The method employed depends on the type of data required.

Objective data, such as academic records and institutional operating costs, can be obtained from existing files, reports, and data bases. When acquiring a large volume of data, the possibility of computer access should be explored. Both manual and computer methods were used in the *Impact Study*. Computer access is more expensive to set up, but is best for handling large amounts of data, avoids

human error in transcribing, and can provide the basis for an on-going system. It may also allow the use of powerful analytical tools in studying the data.

Subjective data, such as students' views and expectations, are not usually available in existing records or files. Students have to be approached in some type of interview or survey. In the *Impact Study*, the questionnaire approach was used extensively. This method was ideally suited to the educational situation. Students could be reached either during the registration procedure or in the classroom. It was relatively easy to survey almost the entire student body because the classroom acted as a collection mechanism.

In the case of the community surveys, however, no such collection mechanism existed. Here, two different methods of acquiring data were used. In the first method, questionnaires were designed and distributed by mail. For the general community survey a notice was mailed in advance, requesting the co-operation of the individuals in the sample, who were selected at random. The questionnaire itself was mailed a week later with a business reply envelope enclosed. In the survey of the business community, co-operation and endorsement was first obtained from the Vancouver Board of Trade and they took responsibility for mailing out the questionnaire. Business reply envelopes were again included. In both surveys a much lower response rate was achieved than in the "classroom" method.

The second method used in the community survey was personal interviews. This was used on only a very limited scale. People willing to be interviewed were identified from the questionnaire returns, appointments were made and interviews conducted. Interviews were taped, the tapes transcribed, and conclusions were drawn from analysis of these printed records. This approach was used to substantiate some of the subjective responses received in the community questionnaire. The personal interview approach is very time consuming and difficult to conduct. Its success and validity depends greatly upon the abilities of the interviewer. However, with a skilled interviewer, misinterpretation of questions or answers can be eliminated. Points of view can be explored for clarification where necessary, and the rate of response from this method is much higher than from mailed questionnaires. This method would be recommended for community surveys where there is a wide range in the background of respondents.

An alternative method that might have been used is a telephone survey. This approach would not be as costly as the personal interviews. However, like the interview method, it depends on the ability and personality of the person doing the telephoning.

Having chosen the method of data collection, the next step was to select the sample size that would give the desired level of precision in the survey. A great deal of care and effort must also be put into ensuring that the sample is chosen "at random" from the parent population and will therefore not bias the end result. Various statistical methods are available to optimize the survey procedure and to devise a sampling method. Once the responses are collected they must be examined against the sample size to test whether or not an observed result is "significant" and to verify that the sample obtained was in fact "random."

In the *Impact Study* nearly all of the surveys conducted were aimed at the entire population instead of a selected sample. Since most of the surveys could be conducted using the "classroom" approach and because the student population of British Columbia is still within a manageable size, surveying the entire population was reasonable. In addition, the operational problems of surveying a random sample

would have been much greater in this case than surveying the entire population. Although this added significantly to the cost of conducting the surveys, it practically ensured that the data would be representative and eliminated the need for sample selection.

Excellent co-operation was received from the Department of Education and from the various post-secondary institutions. These groups administered the questionnaires and made every effort to get as many of the students to respond as possible. Consequently the response rates were generally very good, with about 60% of the students completing the surveys, in most schools and institutions. Only in a few instances did some institutions fail to co-operate, generally due to circumstances peculiar to that time. With response rates so high, the question of whether a sample is "random" becomes rather academic. In addition, practically all observed differences in the results of the surveys are statistically significant since such a high percentage of the population has been measured. Thus the main problem is one of interpreting the findings.

## QUESTIONNAIRE DESIGN

The method of data collection used most extensively in the *Impact Study* was that of surveys by questionnaire. As a result, a great deal of experience was gained in this area, and several points concerning the use of questionnaires are worthy of mention.

In designing a questionnaire it is important to review the objectives of the survey. What information is to be collected, who is being surveyed, and how will the results be used?

The questionnaire should be kept as short as possible. Questions should be designed so that the answers will be comparable with information collected from other sources, and worded to eliminate confusion, ambiguity and bias. They should be designed from the reader's point of view and not the researcher's, and aim to elicit the respondent's co-operation.

Questionnaire design for the *Impact Study* was based on information gathered from a number of sources, including Statistics Canada, the Economic Council of Canada, the 1971 Census of Canada, the Pike Report,[1] the S.C.O.P.E. Study[2] and from extensive work carried out by the authors dating back several years prior to this study. Questionnaires from other surveys were studied and combined.

In their original form, the questionnaires contained a large collection of items. Many of these were eliminated or reworded after consultation with a panel of qualified judges. The panel included a college principal, registrar, dean or counsellor from each college as well as representatives from faculty associations. These individuals reviewed the direction of the study and the specific wording of questionnaires in several workshop sessions.

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1. Robert M. Pike, *Who Doesn't Get to University and Why: a study on the accessibility to higher education in Canada* Ottawa, Association of Universities and Colleges of Canada, 1970.

2. S.C.O.P.E. Study, *School to College: Opportunities for Post-Secondary Education*. Centre for the Study of Higher Education, University of California, Berkeley, California.

The panel of judges and the experience of the authors in earlier studies were used to develop the Socio-Economic Survey (1971) and the Opinion Questionnaire (1971). These two questionnaires were amalgamated into the Post-Secondary Student Survey (1972) and, by providing experience valuable for subsequent surveys (Figure 13-1), they acted as pilot studies for both it and the Grade 12 surveys of 1972 and 1973.

Considerable discussion and debate took place over whether or not to ask respondents to identify themselves. In some of the questionnaires this was not a requirement, avoiding any possible invasion of privacy. However, on other questionnaires identification was requested by way of a student registration number. It was through this identification that answers on one questionnaire could be related to other data such as high school achievement records, college achievement, and post-college achievement (both educational and occupational).

It should be mentioned that some degree of identification was possible by using variables such as sex, date of birth, and high school to match returns from one survey with those from another. Students were not actually identified in this process, but their questionnaires could be matched.

This matching of questionnaires was done in the *Impact Study* with some 2,250 students for whom both a Grade 12 Survey (Spring 1972) and a Post-Secondary Student Survey (Fall 1972) were available. These combined records provided some interesting and useful information. They allowed for the examination of opinions and data obtained from students while still at secondary school and from the same students after they had enrolled at a post-secondary institution.

Many of the questions asked on these two questionnaires were identical. Thus a check could be made to see how individuals responded to the same question four months later. This established a measure on the reliability of answers. Generally, on the more objective questions, from 60% to 70% of the responses were the same on the two questionnaires. The variance that did exist occurred in areas where it was expected.

For example, mother's occupation sometimes changed from "housewife" to another category and similarly father's occupation may have changed from "unskilled" to "semi-skilled," or vice versa. These changes were probably caused by a combination of three factors: changes in some socio-economic variables and opinions during the four month time difference between questionnaires; uncertainty by the respondent about certain socio-economic variables (parents' occupation, education and income); and some unavoidable arbitrariness in the selection of appropriate response options.

However, on the more subjective questions, (e.g., In which activities would you expect to find your greatest life satisfaction?) identical answers were given by only 40% to 50% of the students. While at first glance this may suggest some doubts about the reliability of the results to these questions, it is important to note that the pattern of responses for the entire group of students was almost identical in the two questionnaires. Thus, while some individuals may have changed their answers, the group result stayed remarkably constant (Table 13-1). This was also noted when comparing the results of the 1972 and 1973 Grade 12 surveys. The profiles of students revealed identical patterns.

The foregoing suggests that the volatility of certain subjective data pertaining to specific individuals in a group is considerable, while the same data distributed across the whole group is remarkably stable. In other words, while there can be

Figure 13-1
SAMPLE ITEMS FROM QUESTIONNAIRES

**1. How much concern have the following caused you during the past twelve months? Check one for each item:**

| | Much concern | Some concern | No concern | |
|---|---|---|---|---|
| Physical illness | ☐ | ☐ | ☐ | (51) |
| Emotional problems | ☐ | ☐ | ☐ | (52) |
| Family problems | ☐ | ☐ | ☐ | (53) |
| Social relationships | ☐ | ☐ | ☐ | (54) |
| Financial difficulties | ☐ | ☐ | ☐ | (55) |
| Academic problems | ☐ | ☐ | ☐ | (56) |
| Career problems | ☐ | ☐ | ☐ | (57) |
| | 1 | 2 | 3 | |

**18. Which of the following best describes your family's financial position? Check one only:**

| | | |
|---|---|---|
| Above average | ☐ 1 | (43) |
| Average | ☐ 2 | |
| Below average | ☐ 3 | |

The above questions were used in the Socio-Economic Survey of 1971. From experience gained in this survey, it was decided to refine the questions somewhat for use in the Post-Secondary Student Survey of 1972 as shown below.

**40. Do any of the following cause you concern?** Mark ONLY those which are really important to you:

1. Physical illness
2. Emotional problems
3. Family relationships
4. Other inter-personal relationships
5. Financial difficulties
6. Acadmeic problems
7. Career problems

**19. Which of the following best describes your family's financial position?** Mark ONE only:

1. Considerably above average
2. Somewhat above average
3. Average (family income of about $10,000 per year)
4. Somewhat below average
5. Considerably below average

TABLE 13-1

DISTRIBUTION OF RESPONSES GIVEN BY THE SAME GROUP OF STUDENTS ON TWO DIFFERENT QUESTIONNAIRES

(Percentages)

| Father's Occupation (69% of students answered identically on both surveys) | Clerical | Deceased | Farmer | Managerial | Resources | Professional | Retired | Sales | Semi-Skilled | Services | Skilled | Technical | Transport | Unskilled | Other | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Grade 12 Survey | 2 | 4 | 2 | 23 | 4 | 15 | 3 | 6 | 6 | 3 | 13 | 2 | 3 | 3 | 10 | 100 |
| Post-Secondary Survey | 2 | 4 | 2 | 24 | 4 | 14 | 4 | 6 | 7 | 3 | 12 | 3 | 3 | 4 | 8 | 100 |

| Mother's Occupation (78% of students answered identically on both surveys) | Clerical | Deceased | Farmer | Housewife | Managerial | Professional | Retired | Sales | Semi-Skilled | Services | Skilled | Technical | Transport | Unskilled | Other | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Grade 12 Survey | 10 | 1 | 0 | 59 | 3 | 8 | 1 | 3 | 3 | 2 | 1 | 1 | 0 | 2 | 5 | 100 |
| Post-Secondary Survey | 10 | 1 | 0 | 61 | 3 | 10 | 0 | 3 | 3 | 2 | 1 | 1 | 1 | 2 | 3 | 100 |

| Activities Expected to Give Greatest Life Satisfaction (52% of students answered identically on both surveys) | Career | Profession | Making Money | Marriage | Leisure | Religion | Humanitarian | Arts | Community | Not Listed |
|---|---|---|---|---|---|---|---|---|---|---|
| Grade 12 Survey | 37 | 35 | 23 | 45 | 47 | 7 | 22 | 18 | 3 | 10 |
| Post-Secondary Survey | 43 | 35 | 19 | 53 | 42 | 6 | 20 | 15 | 3 | 12 |

| Important Influences in Deciding on Future Educational Plans (50% of students answered identically on both surveys) | Parent | Family | Friend | HS[1] Teacher | HS Counsellor | PS[2] Counsellor | Former PS Student | Present PS Student | Other Counsellor | Other | Employer |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Grade 12 Survey | 66 | 19 | 21 | 13 | 13 | 6 | 3 | 4 | 3 | 28 | N/A[3] |
| Post-Secondary Survey | 85 | 21 | 19 | 13 | 10 | 2 | N/A | 4 | 1 | 15 | 6 |

1. HS = High School
2. PS = Post-Secondary
3. N/A = Not Applicable

rapid and substantial changes with respect to a specific individual, the properties of the collective are much more stable. This has implications for longitudinal studies in that certain data may be valid only on a group basis not on an individual basis.

One final comment regarding questionnaire design. Questions providing for multiple answers from the student can cause difficulties in the processing, analysis and interpretation stages. While instructions such as "check not more than two" are easily understood by the student, most standard statistical and analytical computer programs do not allow for such possibilities. Results generated are in the form of percent of responses rather than percent of students. These difficulties can be overcome, but it is better to avoid them at the outset.

## DATA PROCESSING

Although the decision to survey the entire population rather than a random sample eliminated the problem of sample design and the operational problems of ensuring that responses were obtained from the entire sample, it did mean that data processing considerations were very important. Typically, there were over 10,000 respondents to each survey conducted. For each of the Grade 12 surveys, it was close to 20,000 students.

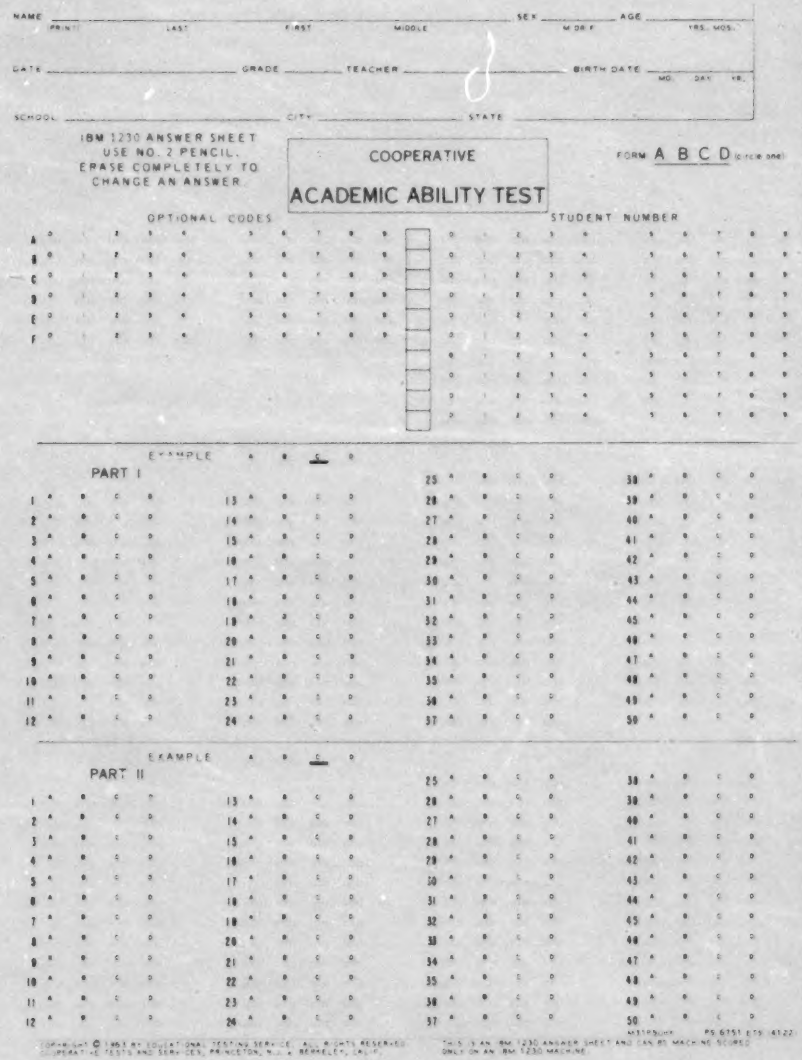
For the first two surveys conducted, the Socio-Economic Survey and the Opinion Questionnaire, the respondents marked their answers in the questionnaire booklet. These were then keypunched onto computer cards and processed by computer. Although this system worked reasonably well, a large time delay and fairly significant cost was introduced by this keypunching requirement.

In the case of the Co-operative Academic Ability Test, the answers were marked by the students in pencil on a special answer sheet accompanying each booklet (Figure 13-2). These sheets could be read by an "optical mark page reader" and then processed by computer. This procedure eliminated the keypunching requirement, saving the time and cost of keypunching. However, considerable difficulties were encountered with these sheets, the most serious being that the sheets were easily damaged either by folding or tearing. When this happened they could no longer be machine read. Another major problem was the relatively slow speed with which these optical mark sheets were read by machine. Finally there was the problem that in order to be machine readable, students had to use a soft lead pencil which, needless to say, did not always happen.

On the Post-Secondary Student Survey and the Grade 12 Surveys, the optical mark concept was also used. However this time optical mark computer cards were provided instead of the sheets. The cards were much sturdier than the sheets, resisting damage extremely well. Also the machine reading proceeded at a much higher speed and the card reader was not as sensitive to "damaged" cards. The problem of the use of ink or light pencil instead of the soft pencil requested still remained. However, this affected less than 3% of the replies received, and these were simply re-touched or reproduced by hand with a suitable soft lead pencil.

The one difficulty with an optical mark card is the limited amount of space available on it. A second card could have been used, but that would have caused complications because the student would have to be identified on both cards. This, in itself, would use up some space on the second card. Instead, the problem was overcome by using both sides of a single card. Although this approach had an-

**Figure 13-2**
**OPTICAL MARK ANSWER SHEET**
**USED IN THE COOPERATIVE ACADEMIC ABILITY TEST**

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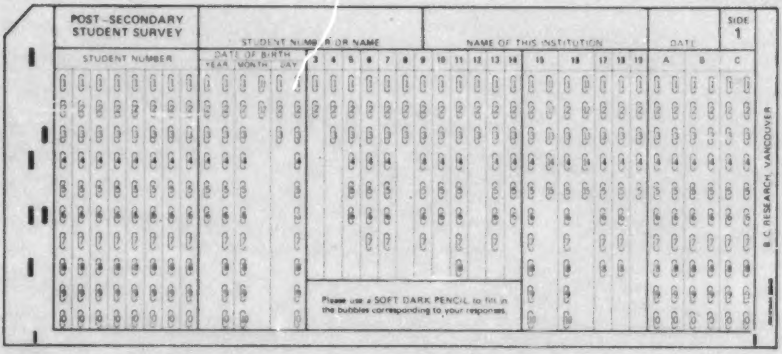
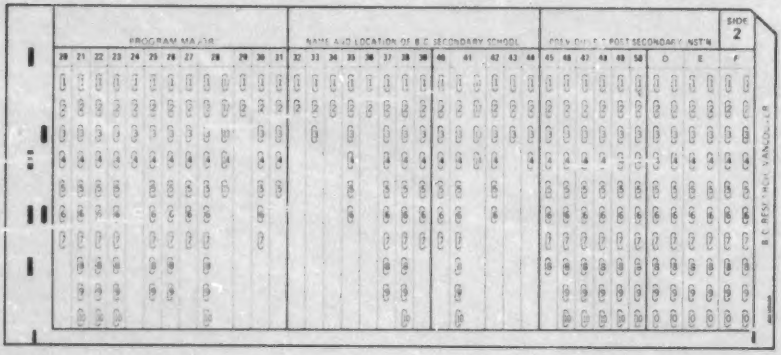
COOPERATIVE TESTS AND SERVICES, PRINCETON, N.J. • BERKELEY, CALIF.

**Figure 13-3**
**OPTICAL MARK CARD USED IN**
**POST-SECONDARY STUDENT SURVEY**


POST-SECONDARY STUDENT SURVEY
STUDENT NUMBER
DATE OF BIRTH
YEAR MONTH DAY
NAME OF THIS INSTITUTION
DATE
SIDE 1
Please use a SOFT DARK PENCIL to fill in the bubbles corresponding to your responses.
B.C. RESEARCH, VANCOUVER

A two-sided optical mark card was used for the Post-Secondary Student Survey of 1972. Although this approach was a new concept; it worked well and proved as an ideal method for data collection. Because the two cards are really the front and back of the same card, it was not necessary to use up space on side 2 with the repeated identification of the student.



parently never been used before for such an application, it was tried for the Post-Secondary Student Survey and worked well (Figure 13-3). The two sides were held together naturally, and each card was simply read twice, once from the front and once from the back, with suitable checking procedures to ensure the front was matched with the correct back. There was no problem of transfer of pencil markings from one card to another, or through the card from one side to the other.

In designing the questionnaire, the data processing method must be planned in advance. Keypunching instructions and codes should be part of the questionnaire booklet. Virtually no coding of information should have to be done after the survey has been conducted, as this will introduce additional costs and delay. The optical mark cards must be very carefully designed and printed. The printer's ink must not interfere with the machine reading and the alignment is very critical. However, the time and effort spent on the design of the system can mean efficient, accurate, and speedy processing.

## SUMMARY

From experience gained in conducting the *Impact Study* several general recommendations and conclusions can be made.

1. The co-operation and direct involvement of all parties must be established at the beginning of the study. These parties must be as committed to its goals and objectives as are the researchers.
2. The method of data collection will depend on the type of data sought, but for subjective "opinions," the questionnaire approach is generally recommended over the interview approach, where a substantial number of respondents is involved.
3. When practical, the entire population should be surveyed. This eliminates sample selection, the problem of randomness, the problem of ensuring full return from the sample population, and the concern over tests of significance.
4. The "classroom" approach to questionnaire administration can yield very high response rates, and is far more successful than a mail survey.
5. Questionnaire design is extremely important. Workshop sessions to discuss the wording and interpretation of questions should involve knowledgeable people who are "in touch" with the individuals being surveyed. Questionnaires should be short and designed to encourage the co-operation of the respondent.
6. Students need not necessarily be identified on the questionnaire in order to match results from several sources. The use of variables such as sex, date of birth, and high school attended can provide an excellent method of matching questionnaire results, with virtually no chance of a "random" match occurring accidentally.
7. Optical mark cards are highly recommended. They can save money and time in data processing.

Chapter 14

# CONCLUSIONS AND IMPLICATIONS

The final chapter of this report presents a summary of the major conclusions which have emerged from the *Impact Study*. To facilitate quick reference to the various aspects of the study, the conclusions are presented by chapter and in the form of statements. Where appropriate, comments are made concerning implications arising from these conclusions.

## THE COMMUNITY COLLEGE CONCEPT (CHAPTER 1)

Of all the provincial systems of community colleges, British Columbia has developed a model which is the most community oriented. In almost every respect, including finance, governance, curriculum and administrative policy, the B.C. colleges are highly responsive to their supporting communities. B.C. colleges have a number of important features in common:

- an emphasis on the development and preservation of a comprehensive college curriculum;
- an "open door" admission policy;
- maximum decentralization of college facilities;
- relatively modest tuition fees;
- programs designed to meet local employment needs;
- a faculty committed to the community college ideal;
- a determination to serve students in a very wide variety of ways.

## THE IMPACT STUDY (CHAPTER 2)

Numerous studies and surveys were conducted as part of the *Impact Study* in order to assess the impact of colleges on students, the educational system, and the community. A series of fourteen working reports were published, providing detailed discussion and tabulations of the survey results.

## COLLEGES AND COLLEGE REGIONS IN BRITISH COLUMBIA (CHAPTER 3)

The community colleges in British Columbia were described briefly and the regions they serve were compared using data from the 1971 Census of Canada. Re-

cent enrolment trends in post-secondary education were examined to illustrate their remarkable growth over the past ten years.

It was found that the educational participation rates in the various college regions are related to the socio-economic characteristics of those areas, most particularly to the educational level of the population. However, it was also observed that the participation rates in areas of similar socio-economic level are somewhat higher in those that have a college campus than in those which do not.

## THE COLLEGE STUDENT — AN ACADEMIC PROFILE (CHAPTER 4)

In terms of academic ability as determined by a standardized test, community college students exhibited a wider range of performance and significantly lower mean scores than university students.

The scores of community college students on the test varied considerably not only among colleges, but among the programs within them.

In terms of achievement (as determined by secondary school grade point average), a significantly higher percentage of students entered universities with A and B grades than community colleges. Nevertheless, a substantial minority of high achievers in secondary school did choose a college in preference to university.

When community college students were compared on the basis of program taken in college, few differences in their secondary school grade point averages were found.

Community colleges attract many students who are several years away from formal education. This was reflected in the wide age range found among college students.

The heterogeneity of the college student population was reflected in the wide variation of their academic achievement, age, years away from formal education, and other characteristics.

### Implications

The diversity of students in terms of academic ability, age, and years away from formal education presents a considerable challenge for community college faculty, staff, and administrators to prepare and offer courses and programs relevant to their existing and potential clientele. Curriculum development will pose a particular problem if the community colleges are to satisfy the objectives of those seeking to broaden equality of opportunity in post-secondary education. The relatively small percentage of academically disadvantaged students entering community colleges, despite "open door" admission policies, suggests the need for colleges to extend remedial and basic skill development programs beyond present commitments.

## THE COLLEGE STUDENT — A SOCIO-ECONOMIC PROFILE (CHAPTER 5)

In general terms, the educational level of the parents of university students was higher than that attained by the parents of college students.

College students enrolled in academic transfer programs tended to have

parents educated to a higher level than students in career/technical and vocational programs.

College students showed a wide range in family income both within and between colleges. These differences tended to reflect the income levels of the communities supporting the colleges.

University students, as a group, indicated higher family incomes than college students.

A higher percentage of the fathers of university students was found to hold "high status" occupations (managerial and professional) than was the case among college students.

The influence of fathers was generally reflected in the programs chosen by college students. The children of fathers with "high status" occupations tended to select programs such as academic transfer which lead to degrees and, presumably, to high status occupations for themselves.

In broad socio-economic terms (parents' occupation, education, and income) post-secondary students formed a selective sample of the general population. University students, as a group, constituted a more selective sample than college students, who in turn were a more selective sample than vocational school students. In other words, university students were least representative of the population at large.

Even on a regional basis, college students were a selective sample of the population.

University students tended to reach the decision to continue their education beyond secondary school at a relatively early age. On the other hand, many college students made the decision only after leaving school.

### Implications

Although community colleges have provided post-secondary educational opportunities for students from a wider socio-economic background than the universities, college students are still not fully representative, in socio-economic terms, of the community at large. Although efforts by colleges to attract students from lower socio-economic groups have had some limited success, greater attention is needed to developing policies which will attract the truly disadvantaged elements of society.

In view of the importance of an early decision to continue education beyond secondary school, efforts to inform students (and parents) of the opportunities of post-secondary education should be directed at them while they are in the early years of secondary school and perhaps even in elementary school, rather than concentrating on the upper secondary school classes.

## THE COLLEGE STUDENT — OPINIONS AND EXPECTATIONS (CHAPTER 6)

Parents and family were the most important groups influencing post-secondary students in making their educational plans. University students were more influenced by their families in making educational plans than were college, vocational school and technical institute students.

In the opinion of college students, community college and secondary school counsellors had little influence upon their educational plans.

There was little consensus among post-secondary students about the basic objectives of post-secondary education, even among those enrolled in similar programs.

Although a large percentage of college students indicated an eventual goal of transferring to university, only a small percentage actually did transfer. Apparently, for one or more reasons, the academic expectations of many students were not being realized.

College students from upper socio-economic groups tended to list university transfer as a goal more often than students from lower socio-economic levels.

A large majority of college students regarded completion of their educational programs as an important priority in their life.

For community college students, the most influential factors in the choice of institution were closeness to home and low cost. Technical and vocational students, in particular, regarded the availability of a specific program as an important factor in their choice of institution.

At the time of registration, it appeared that students were not well informed about many aspects of community colleges such as instructional goals, transfer arrangements, institutional philosophy, and evaluation procedures.

**Implications**

Greater effort appears to be required in the dissemination of information about educational programs and opportunities to the parents and families of potential post-secondary students. Expanding college programs under an open door admission policy may be short-sighted if parents and families, who are the most influential in the educational decision making of students, are not adequately informed of the opportunities available.

Irrespective of family influence, students entering college for the first time were not well informed about college philosophies. Although counsellors had little influence on the educational decisions of students, it would appear that counselling services are required by a substantial proportion of students. This is particularly obvious in light of the very small proportion of academic transfer students who actually attain their expectation of transfer to university.

Contrary to views expressed by some members of the general community and some educators, college students expressed a serious attitude toward their educational endeavours. Regardless of their educational goals, students indicated a willingness to study conscientiously, hopefully close to home, and at low cost. Colleges will have their greatest impact where they provide the programs sought by students at convenient locations.

The lack of any consensus about the specific objectives of post-secondary education further substantiates the logic of a comprehensive community college concept.

## THE COLLEGE STUDENT — CONCERNS (CHAPTER 7)

Of the problems which were reported as being of concern to college students, financial, academic, and career problems ranked highest in importance.

College and vocational school students tended to regard health, family counselling, and psychiatric services as being community responsibilities rather than a college task. University students, on the other hand, tended to regard these services as the responsibility of the educational institution.

A large minority of post-secondary students were not aware of the services available to them.

Students regarded emergency first aid as the major function of college health services rather than more complex functions such as family planning help and psychiatric services.

**Implications**

While financial difficulties appeared as a major concern for a significant proportion of students, the provision of funds from outside sources did not necessarily alleviate their concern on this issue. It would appear that although outside grants certainly help some students to continue their education, these have not provided the economic security that may be required by students while at college.

The desirability of providing extensive health services on the campus of post-secondary institutions is open to question if the opinions of students on this issue are to be given credence.

## THE POTENTIAL COLLEGE POPULATION (CHAPTER 8)

Approximately 60% of first-year college students entered directly from secondary school. The remainder were adult students. By comparison, 85% of first-year university students entered directly from secondary school.

Females slightly outnumbered males in Grade 12. On the other hand, a higher percentage of males than females enrolled as first-year post-secondary students.

At the Grade 12 level, a higher percentage of A and B grades were earned by females than by males.

Grade 12 students from upper socio-economic levels tended to earn higher grades than those from middle and lower socio-economic groups. This phenomenon applied to all measures of socio-economic status: parents' education, occupation, and financial position.

When asked in May to express their intentions about further education, only 40% of Grade 12 students indicated they would commence post-secondary study in the coming fall. However, only 10% of Grade 12 students indicated *no* intention of continuing their studies.

Students who did not intend to continue their education tended to be females, low achievers, and from low socio economic groups.

Father's education was the single most important factor in accounting for post-secondary educational participation rates.

Over-all participation rates in post-secondary education tended to be higher in regions which have community colleges.

The study made of the intentions of Grade 12 students was an effective predictor of their behaviour regarding participation in post-secondary education.

**Implications**

The predictive value of a Grade 12 study in determining future post-secondary enrolments suggests that a regular procedure for monitoring these students should be established. Further, as the study revealed some interesting facts such as the relationship between sex and achievement, and the unique characteristics of "non-continuing" students in post-secondary education, it is evident that further study of these questions may be warranted to identify the contributing factors.

The results indicate that the percentage of Grade 12 students in a region who continue their education beyond secondary school is related to the presence of a community college in that region. This affirms the value of the long-stated political goal of having a community college within commuting distance of every citizen in the province.

The influence of socio-economic factors in a student's background is clearly apparent in his achievement, expectations and behaviour. Evidently, these factors play a role long before graduation from secondary school. It appears that the process of forming an elitist student population, particularly at university, is underway long before students apply for admission. Clearly, post-secondary institution admission policies are not directly responsible for the creation of an elitist student population.

Since 40% of the students entering colleges at the first year level do not come directly from secondary school, and since this group contains a high percentage of mature students, it would seem important for colleges to develop long-term procedures for assessing the educational needs of the adult community to ensure effective use of the educational potential offered by community colleges.

## THE COLLEGE STUDENT AFTER COLLEGE (CHAPTER 9)

College graduates entering the labour market benefitted financially from their college education, but not in proportion to the length of time spent at college.

While criticism of college curricula by college graduates was not widespread, where it did occur it appeared that students were not aware of the direction of their program, its content, and the standard of performance expected.

The satisfaction of graduates with their college programs was directly related to their level of commitment to a vocation. Students who were undecided about working in the types of jobs for which their programs prepared them were more likely to be dissatisfied with college education.

There was widespread dissatisfaction among college graduates with the apparent lack of recognition being demonstrated by their employers toward their college education

Of students who transferred to university, the majority did so after one year at college. This practice appeared to be unrelated to the particular university program chosen or to distance between home and university.

The performance of transfer students at university varied greatly by university faculty and by college from where they transferred. Although transfer students generally had fewer first class grades than direct entry students, their failure rate was approximately the same.

Both transfer and direct entry students improved their university performance in their second and subsequent years at university. There were variations in the rate of improvement by faculty but, on the whole, transfer students improved more than direct entry students.

The college grades of transfer students were directly related to their subsequent grades at university. A college grade point average of 2.0 (C standing) as a pre-requisite for transfer seemed to be reasonable; however, an average of 2.5 as a pre-requisite for transfer would significantly increase the proportion of first or second class standings at university among transfer students.

Approximately one-half of the students transferring to university did not have

the pre-college requirements which would have allowed them to enter university directly from Grade 12. Nevertheless, 40% of this group did succeed in their first year after transfer to university.

### Implications

While community colleges are achieving their goal of meeting the employment needs of the community, they have not yet succeeded in providing the prestige which college graduates expect and deserve. There is a particular need for college instructors to demonstrate to the business community that the careers in their specialities are important and worthwhile. They must demonstrate pride and competence in their areas of specialization.

Any dissatisfaction of students with college was related to their choice of career rather than to college programs. While some restructuring of college curricula may be of value, more intensive occupational counselling would appear to be a more direct way of dealing with the problem.

In judging the academic standards of the colleges, it is unfair merely to compare the university performance of the academic transfer student with that of the direct entry student. It must be remembered that at least half of the transfer students entering university have demonstrated lower academic ability in secondary school than direct entry students. It is, therefore, questionable whether they should be expected to earn grades comparable with those of direct entry students. Allowance must be made for differences in academic aptitude, achievement and background.

Every college should routinely examine the performance of its transfer students at university by faculty, department, and (where numbers are sufficient) by individual subject, as part of an on-going process of monitoring the college's academic standards. However, arbitrary attempts to reduce differentials between the achievements of transfer students and direct entry students could result in a denial of opportunity to many college students who ultimately succeed at university.

## A COMMUNITY VIEWPOINT (CHAPTER 10)

The lower income group within the community was not as aware of the community college as were the middle and upper income groups.

Approximately 40% of community respondents regarded the provision of job skills to be the major purpose of the community college.

Many employers complained about the inadequate practical experience of college graduates.

Employer groups displayed only limited knowledge of community college programs, objectives, and curricula.

Only 40% of employers were prepared to pay higher starting salaries to college graduates than to secondary school graduates; however, approximately two-thirds of employers felt that the potential for a college graduate was greater.

### Implications

Lack of awareness by employers of the potential value of one or two years of education and training beyond secondary school was evident from this study. Even closer liaison between colleges and the business community is necessary if the colleges are to reach their full potential of providing relevant education and

training. Colleges should strive to incorporate more practical field work into their courses, particularly for students in career/technical programs.

## THE COLLEGE FACULTY (CHAPTER 11)

Eighty percent of faculty in academic transfer programs and over 50% of faculty in career/technical programs held a Master's degree or higher.

Community college faculty seemed to be concerned about establishing an identity distinct from university or technical-vocational instructors.

Less than one-third of college faculty expressed support for faculty representation on college councils; however, they did support greater representation of community groups.

Faculty members expressed a variety of opinions when asked to indicate what organization could best represent their views. An existing organization, the College Faculties Federation, was generally considered to be the most appropriate.

The majority of faculty members supported the removal of "out-of-district" fees, the establishment of internship programs, and the use of a semester structure in the college calendar. They were strongly opposed to provincial certification of instructors.

College faculty generally supported the philosophy and direction taken by the community college movement.

The majority of faculty members supported formal procedures for the evaluation of teaching, and generally felt that this could best be done by division or department chairmen.

### Implications

The impression gained from the study is that college faculty are concerned with the establishment of an identity of their own. This has important implications for such matters as faculty organization. It is clear that college faculty should be organized into a single body which represents them as a group with priorities and goals distinct from those of vocational instructors or university lecturers. Only by cohesion and a distinct identity can college faculty develop pride and commitment to the community college as a unique educational institution.

The support of faculty for the idea of internship suggests that this approach for faculty development should be instituted. Without the support of college faculty, an internship program would be neither workable nor desirable.

## SOME FINANCIAL PERSPECTIVES (CHAPTER 12)

Expenditures in post-secondary education in British Columbia have grown at an annual rate of 10.5% (net of inflation) since the mid 'sixties. By comparison, total educational expenditures grew at a rate of 8.2% and the provincial economy at a rate of 6.3%.

There are some fundamental differences in the way in which the major educational sectors are financed in British Columbia. Public schools and community colleges are financed largely from provincial government grants and from local property taxes. Universities, technical and vocational schools receive government grants, but no revenue from local taxation. A much larger proportion of their income, especially in the case of universities, is from tuition fees and miscellaneous sources than is the case for colleges.

The costs of education vary widely between different types of institutions, between institutions of the same type, and between programs in the same institution. In 1973-74, the average annual cost per student (full-time) was $5,000 at university, $3,300 at vocational school, $2,700 at technical institute, $2,300 at community college and $950 in public school. Instructional costs account for about 60% of the costs of post-secondary education, and 67% of the costs of public school education.

Government grants account for 62% of educational revenue in British Columbia, local property taxes for 25% and tuition fees and miscellaneous sources for 13%. The federal government contributes substantially toward the costs of post-secondary education in each province. In 1973-74, about 47% of post-secondary expenditures were federally financed, 71% of this amount being in the form of a "tax transfer." Of the cash portion, 58% represented the purchase of vocational-technical training by Canada Manpower.

## RESEARCH METHODOLOGY (CHAPTER 13)

The co-operation and direct involvement of all parties must be established at the beginning of a project such as the *Impact Study*.

The questionnaire approach was found to be ideally suited to the educational situation, yielding high response rates.

Questionnaire design was extremely important. Workshop sessions involving people who are "in touch" with the individuals being surveyed were very helpful in discussing the wording and interpretation of questions.

Optical mark response cards for questionnaires provided an efficient method of data processing.

**Appendix A**

# QUESTIONNAIRES USED IN THE *IMPACT STUDY*


1. Socio-Economic Survey (1971) ..... 162
2. Opinion Questionnaire (1971) ..... 164
3. Grade 12 Student Survey (1972 & 1973) ..... 167
4. Post-Secondary Student Survey (1972) ..... 170
5. Community Survey (1973) ..... 174
6. College Faculty Questionnaire (1973) ..... 175
7. Community College Alumni Survey (1973) ..... 178
8. Survey of the Business Community's Views (1974) ..... 182

# SOCIO-ECONOMIC SURVEY

## OF POST SECONDARY STUDENTS

NAME OR IDENTIFICATION NOT REQUIRED

Please place an "x" or "✓" in the box beside your answer.
IGNORE ALL NUMBERS. They are for coding purposes only.

**ABOUT THIS QUESTIONNAIRE . . .**

This questionnaire is part of a research study of community colleges in B.C. The purpose of the study is to find out how well the college system is relating to the needs and expectations of college students and also to the needs and expectations of the community. It is trying to get a better idea of the impact of colleges on the whole field of education beyond secondary school level. It wants to take an honest look at what students in colleges are really like, and what they feel about themselves and their education. It also hopes to discover whether or not a wide variety of people from all segments of the population are being attracted to community colleges, and if not, who is. So that comparisons can be made, university students will also be asked to complete this questionnaire.

The gathering of facts like these should mean that a much more realistic kind of information can be used in planning for the future.

The colleges and the students attending them will gain the most from this research, so we beg your patience in answering these questions.

This study is financed by a grant from the Donner Canadian Foundation and is being carried out by researchers from the University of B.C. and from B.C. Research (an independent, non-profit organization).

**1. College or University attended**

**2. Permanent place of residence**

**Census number of place of residence as per map at the back of this questionnaire. This applies only to the Lower Mainland and Greater Victoria.** **Number**

**3. Program taken at college. Check one only:**

- ☐ 1 Academic (university transfer) (21)
- ☐ 2 Academic (general education)
- ☐ 3 Career (technical, vocational)
- ☐ 4 College preparatory
- ☐ 5 Other

**4. Number of college courses you are currently taking. Check one only:**

- ☐ 1 One (22)
- ☐ 2 Two
- ☐ 3 Three
- ☐ 4 Four
- ☐ 5 Five
- ☐ 6 Six or more

**5. How long is it since you left high school? Check one only:**

- ☐ 1 One year (23)
- ☐ 2 Two years
- ☐ 3 Three years
- ☐ 4 Four years
- ☐ 5 Five to nine years
- ☐ 6 Ten or more years

**6. Sex:**

- ☐ 1 Male (24)
- ☐ 2 Female

**7. Age:**

- ☐ 1 18-17 (25)
- ☐ 2 18-19
- ☐ 3 20-24
- ☐ 4 25-34
- ☐ 5 35-44
- ☐ 6 Over 44

**8. Father's (or legal guardian's) occupation. Check one only:**

- ☐ 1 Clerical (clerk, secretary, etc.) (26-27)
- ☐ 2 Deceased
- ☐ 3 Farmer (own farm)
- ☐ 4 Managerial (own business, company manager, executive)
- ☐ 5 Mining, logging, fishing, farm work
- ☐ 6 Professional (doctor, lawyer, teacher, grad. engineer)
- ☐ 7 Retired
- ☐ 8 Sales (retail business, insurance, real estate)
- ☐ 9 Semi-skilled work (factory, mill worker)
- ☐ 10 Service (armed forces, police, motel employee, etc.)
- ☐ 11 Skilled worker (construction, production, tradesman)
- ☐ 12 Technical (technologist, electronic technician, etc.)
- ☐ 13 Transport, communication (telephone, bus, newspaper)
- ☐ 14 Unskilled worker (laborer)
- ☐ 15 Other

**9. Mother's occupation. Check one:**

- ☐ 1 Clerical (clerk, secretary, etc.) (28-29)
- ☐ 2 Deceased
- ☐ 3 Farmer (own farm)
- ☐ 4 Housewife
- ☐ 5 Managerial (own business, company manager, executive)
- ☐ 6 Professional (doctor, lawyer, teacher)
- ☐ 7 Retired
- ☐ 8 Sales (retail business, insurance)
- ☐ 9 Semi-skilled work (factory, mill worker)
- ☐ 10 Service, recreation (motel employee, waitress)
- ☐ 11 Skilled worker (production, trade)
- ☐ 12 Technical (data processor, medical or dental technician)
- ☐ 13 Transport, communication (telephone operator, etc.)
- ☐ 14 Unskilled worker (farm worker, domestic service, etc.)
- ☐ 15 Other

10. **Father's education, highest level completed. Check one only:**

| | | |
|---|---|---|
| Elementary school, less than Grade 9 | 1 | (36) |
| High school, 1-2 years | 2 | |
| High school, 3-5 years | 3 | |
| Some post high school (trade, vocational, technical, university) | 4 | |
| Completed Bachelor's degree | 5 | |
| Some graduate study | 6 | |
| Completed graduate degree | 7 | |
| Do not know | 8 | |

11. **Mother's education, highest level completed. Check one only:**

| | | |
|---|---|---|
| Elementary school, less than Grade 9 | 1 | (91) |
| High school, 1-2 years | 2 | |
| High school, 3-5 years | 3 | |
| Some post high school (trade, vocational, technical, university) | 4 | |
| Completed Bachelor's degree | 5 | |
| Some graduate study | 6 | |
| Completed graduate degree | 7 | |
| Do not know | 8 | |

12. **Highest educational level completed by any one of your brothers or sisters. Check one only:**

| | | |
|---|---|---|
| Have no brothers or sisters | 1 | (32) |
| Did not complete high school | 2 | |
| Still in elementary or high school | 3 | |
| Completed high school | 4 | |
| Presently enrolled in college or university | 5 | |
| Attended college or university but not now enrolled | 6 | |
| Completed Bachelor's degree | 7 | |
| Completed graduate degree | 8 | |

13. **When did you decide to go to university or college? Check one only:**

| | | |
|---|---|---|
| During elementary school | 1 | (33) |
| During junior secondary school | 2 | |
| During senior secondary school | 3 | |
| After completing high school | 4 | |
| Cannot recall | 8 | |

14. **What is the approximate total annual income of your father and mother together? Check one only:**

| | | |
|---|---|---|
| Under $1,000 | 1 | (34-35) |
| $1,000 - $1,999 | 2 | |
| $2,000 - $2,999 | 3 | |
| $3,000 - $3,999 | 4 | |
| $4,000 - $4,999 | 5 | |
| $5,000 - $5,999 | 6 | |
| $6,000 - $7,999 | 7 | |
| $8,000 - $9,999 | 8 | |
| $10,000 - $11,999 | 9 | |
| $12,000 - $14,999 | 10 | |
| $15,000 - $19,999 | 11 | |
| $20,000 and over | 12 | |

15. **Where was your father born? Check one only:**

| | | |
|---|---|---|
| Canada (British) | 1 | (36-37) |
| Canada (French Canadian) | 2 | |
| Canada (Indian or Eskimo) | 3 | |
| Canada (other extraction) | 4 | |
| United States | 5 | |
| British Isles | 6 | |
| Scandinavia | 7 | |
| Germany | 8 | |
| Netherlands | 9 | |
| Russia | 10 | |
| France or Belgium | 11 | |
| Italy | 12 | |
| Spain, Portugal, Greece or Balkans | 13 | |
| Poland | 14 | |
| Ukraine | 15 | |
| Other European | 16 | |
| North Africa and Near East | 17 | |
| Other Africa | 18 | |
| Central America, South America, Mexico | 19 | |
| Australia, New Zealand, Oceania | 20 | |
| China or Hong Kong | 21 | |
| Japan | 22 | |
| India or Pakistan | 23 | |
| Other Asian | 24 | |
| Other | 25 | |

16. **Approximately how much do you expect to spend during your college year on each of the following? Check one for each item:**

| | None/less than $100 | $100 to $299 | $300 to $499 | $500 to $699 | $700 to $899 | $900 to $1099 | $1100 to $1299 | $1300 or more | |
|---|---|---|---|---|---|---|---|---|---|
| Tuition, fees, supplies | | | | | | | | | (38) |
| Room and board | | | | | | | | | (39) |
| Clothing and incidentals | | | | | | | | | (40) |
| Travel and car | | | | | | | | | (41) |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | |

17. **What will be your main source of funds during your college year? Check one only:**

| | | |
|---|---|---|
| Personal savings | 1 | (42) |
| Full-time job | 2 | |
| Part-time job | 3 | |
| Parents | 4 | |
| Spouse | 5 | |
| Loan | 6 | |
| Scholarship | 7 | |
| Bursary | 8 | |
| Other | 9 | |

18. **Which of the following best describes your family's financial position? Check one only:**

| | | |
|---|---|---|
| Above average | 1 | (43) |
| Average | 2 | |
| Below average | 3 | |

## HEALTH SURVEY

1. **How much concern have the following caused you during the past twelve months? Check one for each item:**

| | Much concern | Some concern | No concern | |
|---|---|---|---|---|
| Physical illness | | | | (51) |
| Emotional problems | | | | (52) |
| Family problems | | | | (53) |
| Social relationships | | | | (54) |
| Financial difficulties | | | | (55) |
| Academic problems | | | | (56) |
| Career problems | | | | (57) |
| | 1 | 2 | 3 | |

2. **How much time have you lost from study or work in the past twelve months because of illness or injury? Check one only:**

| | | |
|---|---|---|
| One week or less | 1 | (58) |
| One or two weeks | 2 | |
| Three to five weeks | 3 | |
| Six or more weeks | 4 | |

3. **What number of significant illnesses or injuries have you had in the past twelve months? Check one only:**

| | | |
|---|---|---|
| None | 1 | (59) |
| One or two | 2 | |
| Three or four | 3 | |
| Five or more | 4 | |

4. **How would you evaluate your health status in the past twelve months? Check one only:**

| | | |
|---|---|---|
| Good | 1 | (60) |
| Fair | 2 | |
| Poor | 3 | |

5. **Are you covered by medical insurance? Check one only:**

| | | |
|---|---|---|
| Yes | 1 | (61) |
| No | 2 | |
| Don't know | 3 | |

6. **Do you have a personal physician? Check one only:**

| | | |
|---|---|---|
| Yes | 1 | (62) |
| No | 2 | |
| Don't know | 3 | |

7. **Would you use the following services in a College Health Service if they were available? Check one for each item:**

| | Yes | Maybe | No | |
|---|---|---|---|---|
| Routine examinations | | | 1 | (63) |
| Physical diagnosis | | | 2 | (64) |
| Treatment for minor emergency | | | 3 | (65) |
| Family planning and birth control | | | 4 | (66) |
| Dental care | | | 5 | (67) |
| Nurse home visits for sickness | | | 6 | (68) |
| Psychiatric counselling | | | 7 | (69) |
| Group therapy | | | 8 | (70) |
| | 1 | 2 | 3 | |

8. **How much concern do you think the following will cause you during the coming year? Check one for each item:**

| | Much Concern | Some Concern | No Concern | |
|---|---|---|---|---|
| Physical illness | | | | (71) |
| Emotional problems | | | | (72) |
| Family problems | | | | (73) |
| Social relationships | | | | (74) |
| Financial difficulties | | | | (75) |
| Academic problems | | | | (76) |
| Career problems | | | | (77) |
| | 1 | 2 | 3 | |

9. **If you were concerned about health, where would you seek attention? Check one only:**

| | | |
|---|---|---|
| Personal physician | 1 | (78) |
| Hospital facility | 2 | |
| College health service | 3 | |
| Druggist | 4 | |
| Other | 5 | |
| Don't know | 6 | |

# OPINION QUESTIONNAIRE

## OF POST SECONDARY STUDENTS

NAME

OR

STUDENT NUMBER

COLLEGE

DATE

Please place an "x" or "✓" in the box beside your answer.

IGNORE ALL NUMBERS. They are for coding purposes only.

### ABOUT THIS QUESTIONNAIRE . . .

This questionnaire is part of a research study of community colleges in B.C. The purpose of the study is to find out how well the college system is relating to the needs and expectations of college students and also to the needs and expectations of the community. It is trying to get a better idea of the impact of colleges on the whole field of education beyond secondary school level. It wants to take an honest look at what students in colleges are really like, and what they feel about themselves and their education. It also hopes to discover whether or not a wide variety of people from all segments of the population are being attracted to community colleges, and if not, who is.

The gathering of facts like these should mean that a much more realistic kind of information can be used in planning for the future.

The colleges and the students attending them will gain the most from this research, so we beg your patience in answering these questions.

This study is financed by a grant from the Donner Canadian Foundation and is being carried out by researchers from the University of B.C. and from B.C. Research (an independent, non-profit organization).

(10)

**1. What is the highest level of education that you expect to attain during your lifetime? Check one only:**

| | | |
|---|---|---|
| One or two years of college | ☐ 1 | (11) |
| Vocational or technical diploma not demanding four years of university | ☐ 2 | |
| Bachelor's degree | ☐ 3 | |
| Teaching certificate | ☐ 4 | |
| Master's degree | ☐ 5 | |
| Ph.D. | ☐ 6 | |
| Professional degree (law, medicine, dentistry) | ☐ 7 | |
| I have no idea | ☐ 8 | |

**2. At present, what are your plans after leaving college? Check one only:**

| | | |
|---|---|---|
| Get a full-time job | ☐ 1 | (12) |
| Undecided between work and further education | ☐ 2 | |
| Business or trade school | ☐ 3 | |
| Go to university | ☐ 4 | |
| Get married and stay home | ☐ 5 | |
| Job and education at same time | ☐ 6 | |
| Other | ☐ 7 | |
| No definite plans right now | ☐ 8 | |

**3. Which one of the following objectives of attending college do you consider most important and which one seems to you least important? Check two only:**

| | Most important | Least important | |
|---|---|---|---|
| To acquire certain knowledge and techniques applicable to my vocation or field of special interest | ☐ | ☐ | (13) |
| To acquire and use the skills and habits involved in critical and constructive thinking | ☐ | ☐ | (14) |
| To attain a satisfactory emotional and social adjustment | ☐ | ☐ | (15) |
| To develop a broad general outlook and familiarity with a variety of subjects | ☐ | ☐ | (16) |
| To acquire knowledge and attitudes basic to a satisfying family life | ☐ | ☐ | (17) |
| | 1 | 2 | |

**4. Which of the following do you believe is most important in the college you attend? Check one only:**

| | | |
|---|---|---|
| Much academic competition for grades | ☐ 1 | (18) |
| High academic standards | ☐ 2 | |
| Intellectual atmosphere | ☐ 3 | |
| Reputation for new ideas and new techniques | ☐ 4 | |
| Good program in major area of study | ☐ 5 | |

**5. In which one of the following activities would you expect to find your greatest life satisfaction? Check one only:**

| | | |
|---|---|---|
| Career or occupation | ☐ 1 | (19) |
| Profession | ☐ 2 | |
| Making money | ☐ 3 | |
| Marriage and family | ☐ 4 | |
| Leisure time activities | ☐ 5 | |
| Religious beliefs/activities | ☐ 6 | |
| Improving life for others | ☐ 7 | |
| Literature, art, or music | ☐ 8 | |
| Not listed | ☐ 9 | |

**6. How important do you expect the following to be in terms of your own personal satisfaction while at college? Check one for each item:**

| | Very important | Somewhat important | Not important | |
|---|---|---|---|---|
| Course work in general | ☐ | ☐ | ☐ | (20) |
| Course work in field of major interest | ☐ | ☐ | ☐ | (21) |
| Individual study or research | ☐ | ☐ | ☐ | (22) |
| Getting acquainted with faculty members | ☐ | ☐ | ☐ | (23) |
| Bull-sessions with fellow students | ☐ | ☐ | ☐ | (24) |
| Student government | ☐ | ☐ | ☐ | (25) |
| Off-campus politics | ☐ | ☐ | ☐ | (26) |
| Athletics | ☐ | ☐ | ☐ | (27) |
| Other [illegible] activities | ☐ | ☐ | ☐ | (28) |
| Parties and social life | ☐ | ☐ | ☐ | (29) |
| Individual artistic or literary work | ☐ | ☐ | ☐ | (30) |
| Self-discovery, self-insight (discovery of new interests, talents, etc.) | ☐ | ☐ | ☐ | (31) |
| | 1 | 2 | 3 | |

7. **Is the college able to provide a program of study that you want? Check one only.**

| | | |
|---|---|---|
| Yes | 1 | (32) |
| No | 2 | |
| Not sure | 3 | |

8. **Do you expect to find the following at this college? Check one for each item.**

| | Yes | No | |
|---|---|---|---|
| Good teaching | 1 | | (33) |
| Good educational and vocational counselling | 2 | | (34) |
| Opportunity for independent study | 3 | | (35) |
| Students involved in political or social activities | 4 | | (36) |
| Faculty involved in political or social activities | 5 | | (37) |
| Campus tolerance of different views, dress, etc. | 6 | | (38) |
| | 1 | 2 | |

9. **How much in each of the following areas do you know about the college you are attending? Check one for each item.**

| | A Lot | A Little | Nothing | |
|---|---|---|---|---|
| General philosophy of the college | | | | (39) |
| The number of students attending | | | | (40) |
| What is really expected of a student as far as reading, written work, participation in discussion and original thinking are concerned | | | | (41) |
| Variety and extent of course offerings | | | | (42) |
| The ratio of required work to free electives | | | | (43) |
| The availability of specialized, independent courses of study | | | | (44) |
| The academic reputation of the school | | | | (45) |
| The professional quality of the faculty | | | | (46) |
| The amount of individualized help from the faculty on academic matters | | | | (47) |
| The extent of informal student-faculty contact, opportunity to get to know the faculty personally, etc. | | | | (48) |
| The amount of competition for grades to be expected in relation to the other students | | | | (49) |
| The arrangements for transfer to other institutions | | | | (50) |
| | 1 | 2 | 3 | |

10. **When you think of a college instructor, how important is each of the following to you? Check one for each item.**

| | Very important | Somewhat important | Not important | |
|---|---|---|---|---|
| Knowledgeable in own subject area | | | | (51) |
| Broad general knowledge in all related fields | | | | (52) |
| Possesses the skills and techniques of teaching | | | | (53) |
| Is a good "friend" to the students | | | | (54) |
| Insists on assignments completed on time | | | | (55) |
| Conducts his course basically as a lecture | | | | (56) |
| Requests that students call him by his first name | | | | (57) |
| Encourages active student participation in class | | | | (58) |
| | 1 | 2 | 3 | |

11. **When considering choice of a college, how important were the following? Check one for each item.**

| | Very important | Somewhat important | Not important | |
|---|---|---|---|---|
| Teaching reputation | | | | (59) |
| Research reputation | | | | (60) |
| Active political life | | | | (61) |
| Friendly atmosphere | | | | (62) |
| Low cost | | | | (63) |
| Good athletic program | | | | (64) |
| Close to home | | | | (65) |
| Friend going | | | | (66) |
| Offers financial aid | | | | (67) |
| Intellectual environment | | | | (68) |
| Great deal of academic competition | | | | (69) |
| Emphasis on broad general program | | | | (70) |
| Parental advice | | | | (71) |
| | 1 | 2 | 3 | |

1 (10)

12. **Do you prefer classroom assignments which are definite or ones in which things are left largely or completely to your own initiative? Check one only.**

| | | |
|---|---|---|
| Prefer definite assignments | 1 | (11) |
| Prefer assignments where topics and approach, etc. are left up to me | 2 | |

13. **How do you feel about writing essays? Check one only.**

| | | |
|---|---|---|
| I very much dislike it | 1 | (12) |
| I dislike it somewhat | 2 | |
| I have neutral feelings about this | 3 | |
| I like it somewhat | 4 | |
| I like it very much | 5 | |

14. **If you had to choose between making superior grades or engaging in a number of activities (see below), which would you choose? Check one in each pair.**

| | | | |
|---|---|---|---|
| Participating in extra-curricular clubs, teams, interest groups, etc. | or grades | | (13) |
| Having as many dates as I want | or grades | | (14) |
| Having close friends on campus and spending as much time with them as I want | or grades | | (15) |
| Expressing my true feelings, ideas or knowledge even when they contradict the instructor's | or grades | | (16) |
| | 1 | 2 | |

15. **Public education without a tuition fee is provided in B.C. from Kindergarten to Grade 12. Should such (no student fees) education be extended to include two years of education beyond high school? Check one only.**

| | | |
|---|---|---|
| Yes | 1 | (17) |
| No | 2 | |
| Conditional on scholastic ability | 3 | |
| Not sure | 4 | |

16. **Should student enrolment at college include compulsory student society fees? Check one only.**

| | | |
|---|---|---|
| Yes | 1 | (18) |
| No | 2 | |
| Not sure | 3 | |

17. **Should Student Council activities involve the following? Check one for each item.**

| | Yes | No | |
|---|---|---|---|
| Student social affairs only | | | (19) |
| All matters of general interest to college students | | | (20) |
| All matters of general interest to the community | | | (21) |
| | 1 | 2 | |

18. **Should the following services be available to students on the college campus? Check one for each item.**

| | Definitely | Probably | Not Need | |
|---|---|---|---|---|
| Occupational counselling | | | | (22) |
| General health services | | | | (23) |
| Counselling for social problems | | | | (24) |
| Job placement centre | | | | (25) |
| Dental care | | | | (26) |
| Religious counselling | | | | (27) |
| Psychiatric counselling | | | | (28) |
| Academic counselling | | | | (29) |
| | 1 | 2 | 3 | |

19. **Should students participate significantly in the content and organization of courses, academic policy decisions and matters of this sort? Check one only.**

| | | |
|---|---|---|
| Yes | 1 | (30) |
| No | 2 | |
| Not sure | 3 | |

20. **Which one of these statements comes closer to your own view? Check one only.**

| | | |
|---|---|---|
| Students should be given very great freedom in choosing their subjects of study and in choosing their own areas of interest within those subjects | 1 | (31) |
| There is a body of knowledge to be learned, and the faculty is more competent than the student to direct the student's course of study through required courses, pre-requisites, and the like | 2 | |

21. **With reference to the hiring of college faculty and administration, which of the following do you regard as more important? Check one only.**

| | | |
|---|---|---|
| Nationality should play no part in employment consideration | 1 | (32) |
| Canadian persons of ability should be given employment preference | 2 | |

22. **Did you consult the following about attending college? Check one for each item.**

| | Yes | No | | |
|---|---|---|---|---|
| Parent or guardian | | | 1 | (33) |
| High school teacher | | | 2 | (34) |
| High school counsellor | | | 3 | (35) |
| College student service counsellor | | | 4 | (36) |
| College instructor | | | 5 | (37) |
| Former student of the college | | | 6 | (38) |
| Present student of the college | | | 7 | (39) |
| Canada Manpower counsellor | | | 8 | (40) |
| Employer | | | 9 | (41) |
| | 1 | 2 | | |

23. **Which one of the above did you find most helpful? Check one only.**

| | | |
|---|---|---|
| Fill in the appropriate number (1-9) from Question 22 above | | (42) |
| Check if none were helpful | 1 | (43) |

24. **How important were the following in your decision to attend this college? Check one for each item.**

| | Very important | Somewhat important | Not important | |
|---|---|---|---|---|
| Low cost | 1 | 2 | 3 | (44) |
| Close to home | 1 | 2 | 3 | (45) |
| Scholarship or financial aid available | 1 | 2 | 3 | (46) |
| Many social activities | 1 | 2 | 3 | (47) |
| Permit you to live away from home | 1 | 2 | 3 | (48) |
| Could not get into university | 1 | 2 | 3 | (49) |

25. **How essential is it that you receive good college grades? Check one only:**

| | | |
|---|---|---|
| Very important | 1 | (50) |
| Somewhat important | 2 | |
| Not important | 3 | |

26. **How important is it that you complete college? Check one only:**

| | | |
|---|---|---|
| Very important | 1 | (51) |
| Somewhat important | 2 | |
| Not important | 3 | |

27. **Which of the following statements is most nearly correct in your case? Check one only:**

| | | |
|---|---|---|
| My family is more eager than I am for me to attend college | 1 | (52) |
| My family and I are agreed on the importance of college for me | 2 | |
| I am more eager than my family is for me to attend college | 3 | |
| None of the above is appropriate in my case | 4 | |

28. **How important in life do you expect each of the following areas to be for yourself? In this case, "important" means there is interest and concern, regardless of actual time devoted to it. Check one for each item:**

| | Very important | Somewhat important | Not important | |
|---|---|---|---|---|
| Artistic, cultural interests | 1 | 2 | 3 | (53) |
| Community activities | 1 | 2 | 3 | (54) |
| Family affairs | 1 | 2 | 3 | (55) |
| Financial interests | 1 | 2 | 3 | (56) |
| Humanitarian ideals | 1 | 2 | 3 | (57) |
| Intellectual interests | 1 | 2 | 3 | (58) |
| Politics | 1 | 2 | 3 | (59) |
| Recreation, hobbies | 1 | 2 | 3 | (60) |
| Religion | 1 | 2 | 3 | (61) |
| Sports, athletics | 1 | 2 | 3 | (62) |
| Vocational pursuits | 1 | 2 | 3 | (63) |

29. **About how much interest would you say you have in national and world affairs? Check one only:**

| | | |
|---|---|---|
| A great deal | 1 | (64) |
| A moderate amount | 2 | |
| None at all | 3 | |

30. **In order to attend college, did you move from your permanent place of residence? Check one only:**

| | | |
|---|---|---|
| Yes | 1 | (65) |
| No | 2 | |

31. **How far is the college you are attending from your permanent place of residence? Check one only:**

| | | |
|---|---|---|
| Less than 2 miles | 1 | (66) |
| 2-5 miles | 2 | |
| 5-10 miles | 3 | |
| 10-20 miles | 4 | |
| 20-50 miles | 5 | |
| 50-100 miles | 6 | |
| More than 100 miles | 7 | |

32. **Should colleges provide living accommodation for those students who prefer to live on campus? Check one only:**

| | | |
|---|---|---|
| Yes | 1 | (67) |
| No | 2 | |
| Not sure | 3 | |

33. **Where is your residence while at college? Check one only:**

| | | |
|---|---|---|
| At home with family | 1 | (68) |
| In a student residence | 2 | |
| With relatives | 3 | |
| Away from home in room or apartment | 4 | |
| Commune | 5 | |
| Crash | 6 | |
| Some place not mentioned here | 7 | |

34. **How would you describe your political philosophy, without regard to any party affiliations? Check one only:**

| | | |
|---|---|---|
| Very liberal | 1 | (69) |
| Liberal | 2 | |
| Moderate | 3 | |
| Conservative | 4 | |
| Very conservative | 5 | |
| Non-political | 6 | |
| Don't know | 7 | |

35. **Program taken at college. Check one only:**

| | | |
|---|---|---|
| Academic (university transfer) | 1 | (70) |
| Academic (general education) | 2 | |
| Career (technical, vocational) | 3 | |
| College preparatory | 4 | |
| Other | 5 | |

36. **Number of college courses you are currently taking. Check one only:**

| | | |
|---|---|---|
| One | 1 | (71) |
| Two | 2 | |
| Three | 3 | |
| Four | 4 | |
| Five | 5 | |
| Six or more | 6 | |

37. **Sex:**

| | | |
|---|---|---|
| Male | 1 | (72) |
| Female | 2 | |

38. **Age:**

| | | |
|---|---|---|
| 16-17 | 1 | (73) |
| 18-19 | 2 | |
| 20-24 | 3 | |
| 25-34 | 4 | |
| 35-44 | 5 | |
| Over 44 | 6 | |

# STUDENT SURVEY
## Grade 12

**ABOUT THIS QUESTIONNAIRE . . .**

This questionnaire is part of a research study of community colleges in B.C. The purpose of the study is to find out how well the college system is relating to the needs and expectations of all types of students and of the community as a whole. It is trying to get a better idea of the impact colleges are making on the whole field of education beyond high school. We hope to discover whether or not a wide variety of people from all segments of the population are attracted to community colleges and, if not, who is. Therefore we must get a clear picture of the background and educational plans of all Grade 12 students, whether they are interested in going on with their education or not. The results from this survey in which you are taking part will be compared with those of another survey of students who entered college and university in the fall of 1971, and also with the same kind of survey which is planned for the fall of 1972.

The gathering of facts like these will provide a great deal of information which until now has not been available to the people who are responsible for planning courses and facilities for schools, colleges, and universities. Students in all stages of their education will benefit the most from this research, and we therefore ask your patience in answering these questions honestly and carefully.

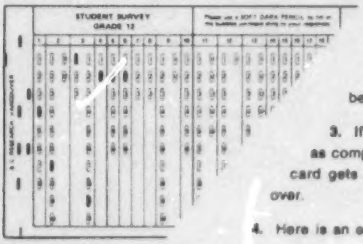
This study is paid for by a grant from the Donner Canadian Foundation, and is being carried out by researchers from the University of B.C. and from B.C. Research, an independent, non-profit organization.

*We very much appreciate your help. Your participation is, of course, voluntary.*
*Please note that your name, signature, or identification is NOT required.*

**TO ANSWER THIS QUESTIONNAIRE . . . PLEASE COMPLETE THE ANSWER CARD PROVIDED**

1. **Please use a dark pencil, "HB" or softer — NOT INK.**

The pencil should be blunt rather than very sharp, to avoid lead smudges on the card if the point should break and also to ensure reasonably wide markings. The mark should be a dull black — ink is too shiny for the purpose.




2. The marks should not run over the edges of the numbered oval spaces. A mark need not entirely fill the space — one dark vertical line, down the centre of the space will be all right.

3. If you make a mistake, you should erase the mark as completely as possible. If this is not possible or if the card gets smudged, please ask for another card and start over.

4. Here is an example of how to complete the answer card.

**LOOK AT QUESTIONS 1 to 6.**

Suppose you were born in **1954** on **July 19** and are a **girl** enrolled in a **commercial** program with a **B** average: your card would then begin to be filled out as shown above.

1. **Year of birth:**
   1. 1951 or earlier
   2. 1952
   3. 1953
   4. 1954
   5. 1955
   6. 1956
   7. 1957
   8. 1958 or later

2. **Month of birth:**
   1. January
   2. February
   3. March
   4. April
   5. May
   6. June
   7. July
   8. August
   9. September
   10. October
   11. November
   12. December

3. **Day of birth:**

4. **Sex:**
   1. Male
   2. Female

5. **In which secondary school program are you currently enrolled?** Check ONE only
   1. Academic — Technical
   2. Commercial
   3. Industrial
   4. Community Services
   5. Visual and Performing Arts
   6. Other

6. **What is your approximate overall grade-average?** Check ONE only:

| | | | | |
|---|---|---|---|---|
| 1. A | — | 88 - 100 | — | 5 |
| 2. B | — | 73 - 86 | — | 4 |
| 3. C+ | — | 67 - 72 | — | 3 |
| 4. C | — | 60 - 66 | — | 2 |
| 5. P | — | 50 - 59 | — | 1 |
| 6. F | — | 0 - 49 | — | 0 |

7. **Do you expect to complete your high school graduation requirements during the current school year?** Check ONE only
   1. Yes
   2. Maybe
   3. No

8. **Where do you think you rank in relation to the other students in your grade?** Check ONE only
   1. Upper third
   2. Middle third
   3. Lower third

9. **What is the highest level of education you expect to attain during your lifetime?** Check ONE only
   1. Graduate from secondary school
   2. One or two years at a community college
   3. Business school diploma
   4. Vocational school diploma
   5. Technical institute diploma
   6. Art school diploma
   7. Bachelor's degree
   8. Teaching certificate, with B.Ed.
   9. Master's degree
   10. Professional degree (law, medicine, dentistry, etc.)
   11. Ph.D.
   12. I have no idea

10. **When did you reach your decision concerning your plan for further education?** Check ONE only
    1. In grade 7 or earlier
    2. In grade 8, 9, or 10
    3. In grade 11
    4. In grade 12
    5. Still undecided
    6. Cannot recall

11. **Which of the following were most important in helping or influencing you to decide on your future educational plans?** Check NOT MORE THAN TWO:
    1. Parent or guardian
    2. Others in your family or relatives
    3. Friend
    4. Secondary school teacher
    5. Secondary school counsellor
    6. Post-secondary instructor or counsellor
    7. Former post-secondary student
    8. Present post-secondary student
    9. Other counsellor (Canada Manpower, YMCA, Social Worker, etc.)
    10. Other individual

12. **In which of the following activities would you expect to find your greatest life satisfaction.** Check NOT MORE THAN TWO
    1. Career, occupational or vocational activities
    2. Profession or intellectual activities
    3. Making money
    4. Marriage and family
    5. Leisure time activities, sports
    6. Religious beliefs and activities
    7. Improving life for others, humanitarian activities
    8. Literature, art, music
    9. Community activities, politics
    10. Not listed

13. **What is your father's or legal guardian's occupation?** Check ONE only
    1. Clerical (clerk, secretary, etc.)
    2. Deceased
    3. Farmer (own farm)
    4. Managerial (own business, company manager, executive)
    5. Mining, logging, fishing, farm work
    6. Professional (doctor, lawyer, teacher, grad. engineer)
    7. Retired
    8. Sales (retail business, insurance, real estate)
    9. Semi-skilled work (factory, mill worker)
    10. Service (armed forces, police, motel employee, etc.)
    11. Skilled worker (construction, production, tradesman)
    12. Technical (technologist, electronic technician, etc.)
    13. Transport, communication (telephone, bus, newspaper)
    14. Unskilled worker (labourer)
    15. Other

14. **What is your mother's occupation?** Check ONE only:
    1. Clerical (clerk, secretary, etc.)
    2. Deceased
    3. Farmer (own farm)
    4. Housewife
    5. Managerial (own business, company manager, executive)
    6. Professional (doctor, lawyer, teacher)
    7. Retired
    8. Sales (retail business, insurance, real estate)
    9. Semi-skilled work (factory, mill worker)
    10. Service, recreation (motel employee, waitress)
    11. Skilled worker (production, trade)
    12. Technical (data processor, medical or dental technician)
    13. Transport, communication (telephone operator, etc.)
    14. Unskilled worker (farm worker, domestic service, etc.)
    15. Other

15. **What is the highest level of education completed by your father?** Check ONE only
    1. Elementary school, less than grade 8
    2. High school, 1-2 years
    3. High school, 3-5 years
    4. Trade or vocational training
    5. Technical training or some university study
    6. Completed Bachelor's degree
    7. Completed post-graduate degree
    8. Do not know

16. **What is the highest level of education completed by your mother?** Check ONE only
    1. Elementary school, less than grade 8
    2. High school, 1-2 years
    3. High school, 3-5 years
    4. Trade or vocational training
    5. Technical training or some university study
    6. Completed Bachelor's degree
    7. Completed post-graduate degree
    8. Do not know

17. **What is the highest level of education achieved by your brothers or sisters?** Check only the HIGHEST level achieved.

1. Have no brothers or sisters
2. Still in elementary or secondary school, or not yet attending school
3. Did not complete secondary school
4. Completed secondary school
5. Trade or vocational training
6. Currently enrolled at a college or technical institute or as a university undergraduate
7. Attended a community college, technical institute or university as an undergraduate, but not now enrolled
8. Completed community college or technical institute diploma
9. Completed Bachelor's degree
10. Completed post-graduate degree

18. **Which of the following best describes your family's financial position?** Check ONE only.

1. Considerably above average
2. Somewhat above average
3. Average (parents' total income of about $10,000/year)
4. Somewhat below average
5. Considerably below average

19. **Do you plan to continue your education or training in any formal way beyond the end of the current school year?** Check ONE only.

1. Yes, within a year
2. Yes, after working for about one year
3. Yes, after working for two years or more
4. Maybe, within a year
5. Maybe, after working for about one year
6. Maybe, after working for two years or more
7. No, I definitely do not intend to continue my education

**Please continue with Question No. 21 and skip Question No. 20 if your answer to Question No. 19 was "YES" or "MAYBE".**

20. **If your answer to Question No. 19 was "NO", which of the following factors were important in causing you to decide against further training or education?** Check NOT MORE THAN THREE.

1. I do not think that further education or training will be useful to me
2. I don't think I have the academic ability necessary
3. I want to work in my family's business
4. I am not interested in further training or education
5. I dislike studying of any kind
6. My family are pressuring me not to continue with further training or education
7. I do not have the means of raising the necessary money
8. I must contribute to the support of my family and will not have time for further training or education
9. I have no clearly defined interests at present which would require further training or education
10. I have additional reasons to those listed above

**If your answer to Question No. 19 was "NO", the remaining questions do not apply to you, so please stop here.**

21. **If your answer to Question No. 19 was "MAYBE", which of the following factors would be important in causing you to decide to continue your education? Skip this question if your answer was "YES".**

Check NOT MORE THAN THREE.

1. If I am admitted to one of the educational institutions to which I have applied (or will apply)
2. If a community college were located within easy commuting distance
3. If a vocational or trade school were located within easy commuting distance
4. If I could get adequate financial assistance while I study
5. If I can't get the type of job I'd like without further study
6. If it is a choice between being unemployed and continuing my education
7. If I didn't have to contribute towards the support of my family
8. If I get married soon
9. If I do not get married soon
10. Additional factors not listed above

22. **What are your plans for further training or education after leaving secondary school?** Check ONE only.

1. Business school
2. Vocational, art or trade school
3. Technical institute
4. Community college — university transfer program
5. Community college — career program
6. Community college — vocational, art or other program
7. University
8. Other plans
9. Undecided

23. **Which institution would you like to attend as your first choice?** Check ONE only.

1. Colleges: Camosun
2. Cariboo
3. Capilano
4. Douglas
5. Malaspina
6. New Caledonia
7. Okanagan
8. Selkirk
9. Vancouver City
10. Other in B.C.
11. Nearest B.C. vocational or art school
12. B.C. Institute of Technology
13. University of B.C.
14. University of Victoria
15. Simon Fraser University
16. Notre Dame University
17. University outside B.C.
18. Other institution in B.C.
19. Other institution outside B.C.

24. **If you are unable to enroll at your first choice of institution, which would you attend?** Check NOT MORE THAN TWO.

1. Colleges: Camosun
2. Cariboo
3. Capilano
4. Douglas
5. Malaspina
6. New Caledonia
7. Okanagan
8. Selkirk
9. Vancouver City
10. Other in B.C.
11. Nearest B.C. vocational or art school
12. B.C. Institute of Technology
13. University of B.C.
14. University of Victoria
15. Simon Fraser University
16. Notre Dame University
17. University outside B.C.
18. Other institution in B.C.
19. Other institution outside B.C.

25. **What do you expect to be your MAIN source of funds while you continue your education?** Check NOT MORE THAN TWO.

1. Personal savings
2. Full-time job
3. Part-time job
4. Parents
5. Spouse
6. Loan
7. Scholarship
8. Bursary
9. Other

1. **Student number:**
Please enter it so that its last digit is in the right-most column as shown in the example on the front page

**Please also write your STUDENT NUMBER (or print your name if you don't have a number), the NAME OF THIS INSTITUTION and today's DATE in the spaces provided at the top of side 1 of your answer card.**

2. **Date of birth:**
Please fill in the digits giving the year, month and day of your birth, in that order

3. **Sex:**
1. Male
2. Female

4. **What is your enrollment status?** Mark ONE only
1. Full-time (5 or more courses)
2. Part-time taking half-load or more (3 - 4 courses)
3. Part-time taking less than half load (1 - 2 courses)

5. **Into which program are you now enrolling?** Mark ONE only
1. College preparatory
2. Career — Technical
3. Vocational
4. Academic transfer — university
5. General education
6. Other

**Please write the name of your intended PROGRAM MAJOR in the space at the top of side 2 of your answer card.**

6. **What was the last grade you successfully completed at school?** Mark ONE only
1. Grade 7 or less
2. Grade 8
3. Grade 9
4. Grade 10
5. Grade 11
6. Grade 12
7. Grade 13

7. **How long is it since you left secondary school?** Mark ONE only
1. Less than 1 year
2. 1 year
3. 2 years
4. 3 years
5. 4 years
6. 5 to 9 years
7. 10 or more years

8. **Where did you last attend secondary school?** Mark ONE only
1. In British Columbia
2. In another Canadian province
3. Not in Canada

**If in B.C., please indicate the name and location of the SECONDARY SCHOOL in the space at the top of side 2 of your answer card.**

9. **If you last attended school in B.C., in which secondary school program were you enrolled ?** Mark ONE only
1. Academic-Technical
2. Commercial
3. Industrial
4. Community Services
5. Visual and Performing Arts
6. General (old program)
7. Other

10. **What was your approximate overall secondary school grade average?** Mark ONE only
1. A = 86 - 100 = 5
2. B = 73 - 85 = 4
3. C+ = 67 - 72 = 3
4. C = 60 - 66 = 2
5. P = 50 - 59 = 1
6. F = 0 - 49 = 0

11. **What was your main activity at the end of October last year?** Mark ONE only
1. Student at: Secondary school
2. Community college
3. University
4. Other institution
5. Employed in a permanent position
6. Employed in a between-study-term job
7. Unemployed
8. Other

12. **Where was this activity located?** Mark ONE only
1. In British Columbia
2. In another Canadian province
3. Not in Canada

**If you were attending a POST-SECONDARY institution in B.C. at the end of October last year, please write its name in the space on side 2 of your card and answer questions 13 and 14. Otherwise skip to question 15.**

13. **At what stage of post-secondary study were you at the end of October last year?** Mark ONE only
1. Academic system: 1st year
2. 2nd year
3. Trimester system: 1st term
4. 2nd term
5. 3rd term
6. 4th term
7. Other

14. **In which program of post-secondary study were you enrolled at the end of October last year?** Mark ONE only
1. College preparatory
2. Career — Technical
3. Vocational
4. Academic transfer — university
5. General education
6. Other

15. **What is your father's or legal guardian's occupation?** Mark ONE only
1. Clerical (clerk, secretary)
2. Deceased
3. Farmer (own farm)
4. Managerial (own business, company manager, executive)
5. Miner, logger, fisherman, farm worker
6. Professional (doctor, lawyer, teacher, graduate engineer)
7. Retired
8. Sales (retail business, insurance, real estate)
9. Semi-skilled worker (factory, mill worker)
10. Service (armed forces, police, motel employee)
11. Skilled worker (construction, production, tradesman)
12. Technical (technologist, electronic technician)
13. Transport, communications (telephone, bus, newspaper)
14. Unskilled worker (labourer)
15. Other

16. **What is your mother's occupation?** Mark ONE only
1. Clerical (clerk, secretary)
2. Deceased
3. Farmer (own farm)
4. Housewife
5. Managerial (own business, company manager, executive)
6. Professional (doctor, lawyer, teacher, nurse)
7. Retired
8. Sales (retail business, insurance, real estate)
9. Semi-skilled work (factory, mill worker)
10. Service, recreation (motel employee, waitress)
11. Skilled worker (production, trade)
12. Technical (data processor, medical or dental technician)
13. Transport, communications (telephone operator)
14. Unskilled worker (farm worker, domestic service)
15. Other

17. **What is the highest level of education completed by your father?** Mark ONE only.

1. Elementary school, less than grade 8
2. High school, 1 - 2 years
3. High school, 3 - 5 years
4. Trade or vocational training
5. Technical training or some university study
6. Completed Bachelor's degree
7. Completed post-graduate degree
8. Do not know

18. **What is the highest level of education completed by your mother?** Mark ONE only.

1. Elementary school, less than grade 8
2. High school, 1 - 2 years
3. High school, 3 - 5 years
4. Trade or vocational training
5. Technical training or some university study
6. Completed Bachelor's degree
7. Completed post-graduate degree
8. Do not know

19. **Which of the following best describes your family's financial position?** Mark ONE only.

1. Considerably above average
2. Somewhat above average
3. Average (family income of about $10,000 per year)
4. Somewhat below average
5. Considerably below average

**THIS IS THE END OF SIDE 1 OF YOUR ANSWER CARD. PLEASE TURN IT OVER AND CONTINUE ON SIDE 2.**

20. **When did you decide to continue education beyond secondary school?** Mark ONE only.

1. In grade 7 or earlier
2. In grade 8, 9, or 10
3. In grade 11
4. In grade 12
5. After leaving school
6. Still undecided
7. Cannot recall

21. **Which of the following individuals were most important in helping or influencing you to decide on your future educational plans?** Mark NOT MORE THAN TWO.

1. Parent or guardian
2. Others in your family or relatives
3. Friend
4. Secondary school teacher
5. Secondary school counsellor
6. College instructor or counsellor
7. Other counsellor (Canada Manpower, Y.M.C.A., Social Worker, etc.)
8. Present or former college student
9. Employer or professional person
10. Other individual

22. **What is the highest level of education you expect to attain during your lifetime?** Mark ONE only.

1. Graduate from secondary school
2. Trade qualification
3. One or two years at a community college
4. Technical institute diploma
5. Bachelor's degree
6. Teaching certificate, with B.Ed.
7. Professional degree (law, medicine, dentistry, etc.)
8. Master's degree
9. Ph.D.
10. I have no idea

23. **In which of the following activities would you expect to find your greatest life satisfaction?** Mark NOT MORE THAN TWO.

1. Career, occupational or voc. tional activities
2. Professional or intellectual activities
3. Making money, business interests
4. Marriage and family
5. Leisure time activities, sports
6. Religious beliefs and activities
7. Improving life for others, humanitarian activities
8. Literature, art, music
9. Community activities, politics
10. Not listed

24. **Which one of the following objectives of post-secondary education do you consider the most important?** Mark ONE only.

1. Learn skills that lead to a job
2. Learn skills and habits used in critical and constructive thinking
3. Attain satisfactory emotional and social adjustment
4. Develop a broad general outlook on a variety of subjects

25. **Which of the following are important in terms of your own personal satisfaction while at college?** Mark NOT MORE THAN THREE.

1. Academic competition, getting good grades
2. Study in a field of major interest
3. "Rap" sessions with fellow students
4. Athletics
5. Social life
6. Individual artistic or literary work
7. Student activities
8. Self-discovery (discovery of new interests, talents, ideas, etc.)
9. Acquiring general background knowledge in a variety of subjects

26. **Do you know about the following aspects of the college you are attending?** Mark ONLY those applicable.

1. General philosophy of the college
2. Number of students attending
3. Course work requirements
4. Variety and extent of course offerings
5. Availability of specialized, independent courses of study
6. Instructional reputation of the institution
7. Amount of individualized help from the faculty
8. Transferability of credits to other institutions
9. Extracurricular activities

27. **Which of the following do you consider most important in a college instructor?** Mark NOT MORE THAN TWO.

1. Knowledgeable in own subject area
2. Broad knowledge of related fields
3. Possesses good teaching skills
4. Approachable personality
5. Requires high standard of performance
6. Good reputation with former students
7. Encourages active student participation in class

28. **When considering choice of a college, which of the following were the most important influences?** Mark NOT MORE THAN THREE.

1. Good teaching reputation
2. Particular programmes available
3. Good intellectual or research reputation
4. Low cost
5. Close to home
6. Refused admittance to first-choice institution
7. Friends going
8. Advice of parent or guardian
9. Extra-curricular activities
10. Good physical facilities
11. Did not seriously consider other alternatives
12. Stepping-stone to another institution
13. Broad, general program offered
14. Opportunity to live away from home
15. Easier to gain acceptance for admission

29. **Was this your first choice of institution?**

1. Yes
2. No

30. **What are your immediate plans after leaving this institution?** Mark ONE only.

1. Travel
2. Get a full-time job
3. Work and continue education at the same time
4. Get married and raise a family
5. Continue education full-time
6. Undecided between work and further education
7. Other

31. **If you intend to continue your education beyond this institution, where would you go?** Mark ONE only.

1. Community college
2. Technical institute
3. University
4. Other
5. Do not plan to continue education

32. **Should students participate significantly in college policy decisions?**

1. Yes
2. No

33. **Public education without a tuition fee is provided in B.C. from Kindergarten to Grade 12. Should such (no student fees) education be extended to include two years of education beyond high school?** Mark ONE only.

1. Yes
2. No
3. Conditional upon ability of student

34. **Did you move from your permanent place of residence in order to attend college?**

1. Yes
2. No

35. **Where will you be living this term?** Mark ONE only.

1. At home with family
2. In a student residence
3. With relatives
4. With friends
5. Alone
6. In a co-operative

36. **Should colleges provide living accommodation for those students who prefer to live on campus?**

1. Yes
2. No

37. **How far is the college you are attending from your permanent place of residence?** Mark ONE only.

1. less than 2 miles
2. 2 - 5 miles
3. 5 - 10 miles
4. 10 - 20 miles
5. 20 - 50 miles
6. 50 - 100 miles
7. 100 - 200 miles
8. 200 - 500 miles
9. more than 500 miles

38. **What do you expect to be your main sources of funds while you continue your education?** Mark NOT MORE THAN TWO.

1. Personal savings
2. Full-time job
3. Part-time job
4. Parents
5. Spouse
6. Loan
7. Scholarship
8. Bursary
9. Government supported program
10. Other

39. **What do you expect your personal average MONTHLY expenditure to be while attending this institution (including tuition fees, room and board, transportation costs, clothing, recreation and entertainment, etc)?** Mark ONE only.

1. $50 or less
2. $51 - 100
3. $101 - 150
4. $151 - 200
5. $201 - 250
6. $251 - 300
7. Over $300

40. **Do any of the following cause you concern?** Mark ONLY those which are really important to you.

1. Physical illness
2. Emotional problems
3. Family relationships
4. Other inter-personal relationships
5. Financial difficulties
6. Academic problems
7. Career problems

41. **Which of the following services do you think could significantly help you to cope with your concerns?** Mark ONLY those you feel you would definitely use.

1. Medical services
2. Psychiatric services
3. Family social counselling
4. Dental care
5. Family planning and birth control information
6. Legal advice
7. Information on drugs, alcohol, tobacco
8. Career counselling
9. Job placement centre
10. Academic counselling
11. Study skills, remedial programs
12. Financial counselling
13. Religious counselling
14. Referral service (a general clearinghouse for all types of problems)

42. **Could you obtain these services if you needed them now?** Mark ONE only.

1. Yes, all of them
2. Yes, most of them
3. Yes, some of them
4. Only a few of them
5. No, none of them
6. Don't know

43. **How do you think these services should be made available to students?** Mark ONE only.

1. On campus
2. By arrangement with the appropriate services within the community
3. No special arrangements for students are necessary

44. **How would you evaluate the general state of your health?** Mark ONE only.

1. Excellent
2. Good
3. Fair
4. Poor

45. **Please indicate your age range.** Mark ONE only.

1. under 18
2. 18 - 19
3. 20 - 21
4. 22 - 24
5. 25 - 29
6. 30 - 34
7. 35 - 44
8. over 44

# COMMUNITY SURVEY

Please place an "X" or "✓" in the box beside your answer. IGNORE ALL THE NUMBERS TO THE RIGHT OF THE BOXES. They are for coding purposes only.

When each adult member of your family has completed one questionnaire, please mail them all to B.C. RESEARCH in the enclosed postage-prepaid envelope.

**1. Number of persons of 16 years of age or over, including yourself, in your household:**

| | | |
|---|---|---|
| 1 | ☐ 1 | (11) |
| 2 | ☐ 2 | |
| 3 | ☐ 3 | |
| 4 | ☐ 4 | |
| 5 or more | ☐ 5 | |

**2. Your sex:**

| | | |
|---|---|---|
| Male | ☐ 1 | (12) |
| Female | ☐ 2 | |

**3. Your age range:**

| | | |
|---|---|---|
| 16-17 | ☐ 1 | (13) |
| 18-19 | ☐ 2 | |
| 20-24 | ☐ 3 | |
| 25-34 | ☐ 4 | |
| 35-44 | ☐ 5 | |
| Over 44 | ☐ 6 | |

**4. What is the approximate annual income of your household?** Check ONE only:

| | | |
|---|---|---|
| Above average | ☐ 1 | (14) |
| Average (approximately $10,000 per year) | ☐ 2 | |
| Below average | ☐ 3 | |

**5. What is your highest level of formal education?** Check ONE only:

| | | |
|---|---|---|
| Elementary school (less than Grade 8) | ☐ 1 | (15) |
| High school (1-2 years) | ☐ 2 | |
| High school (3-5 years) | ☐ 3 | |
| Some post high school (trade, vocational, technical, university) | ☐ 4 | |
| Completed Bachelor's degree | ☐ 5 | |
| Some graduate study | ☐ 6 | |
| Completed graduate degree (M.A., Ph. D., etc.) | ☐ 7 | |

**6. What is your main occupation?** Check ONE only:

| | | |
|---|---|---|
| Clerical (clerk, secretary) | ☐ 1 | (16-17) |
| Farmer (own farm) | ☐ 2 | |
| Housewife | ☐ 3 | |
| Managerial (own business, company manager, executive) | ☐ 4 | |
| Miner, logger, fisherman, farm worker | ☐ 5 | |
| Professional (doctor, lawyer, teacher, nurse, graduate engineer) | ☐ 6 | |
| Retired | ☐ 7 | |
| Sales (retail business, insurance, real estate) | ☐ 8 | |
| Semi-skilled worker (factory, mill worker) | ☐ 9 | |
| Service (armed forces, police, motel employee) | ☐ 10 | |
| Skilled worker (construction, production, tradesman) | ☐ 11 | |
| Student | ☐ 12 | |
| Technician (technologist, electronic technician, data processing, medical or dental technician) | ☐ 13 | |
| Transport, communications (bus, telephone, newspaper) | ☐ 14 | |
| Unskilled worker (labourer, domestic service) | ☐ 15 | |
| Other (please specify) | | |

**7. To the best of your knowledge, is there a community college in your municipality?**

| | | |
|---|---|---|
| Yes | ☐ 1 | (18) |
| No | ☐ 2 | |

**8. If yes, and you can recall the name of the college, please write it in the following space:**

(19-20)

**9. Have you ever taken any course or program at your local community college?**

| | | |
|---|---|---|
| Yes | ☐ 1 | (21) |
| No | ☐ 2 | |

**10. What course or what sort of program at the college would interest you?** Check NOT MORE THAN TWO.

| | | |
|---|---|---|
| Academic courses that could lead to university | ☐ 1 | (22) |
| Academic courses for general interest | ☐ 2 | (23) |
| Art and Applied Arts (fine arts, music, journalism, theatre, photography, interior design) | ☐ 3 | |
| Business Administration (sales, accounting, data processing, finance) | ☐ 4 | |
| Community Services (food services, pre-school teaching, library, nursing) | ☐ 5 | |
| Evening courses leading to a high school certificate | ☐ 6 | |
| Vocational-Technical (drafting, chef training, engineering, automotive, barbering, machine shop) | ☐ 7 | |

**11. If you were given a choice, how would you prefer to take a course or program of study?** Check NOT MORE THAN TWO.

| | | |
|---|---|---|
| By T.V. | ☐ 1 | (24-25) |
| Full-time university | ☐ 2 | (26-27) |
| Part-time university | ☐ 3 | |
| Full-time community college | ☐ 4 | |
| Part-time community college | ☐ 5 | |
| At YMCA/YWCA or community centre | ☐ 6 | |
| Full-time vocational school | ☐ 7 | |
| Part-time vocational school | ☐ 8 | |
| Correspondence | ☐ 9 | |
| Adult Education Program at high school | ☐ 10 | |
| Institution closest to home | ☐ 11 | |

**12. In your opinion, which of the following should be the MAIN PURPOSE of a community college?** Check ONE only:

| | | |
|---|---|---|
| Provide training for a specific job | ☐ 1 | (28) |
| Provide an opportunity for continuing formal education which could eventually lead to a university degree | ☐ 2 | |
| Personal satisfaction or fulfillment | ☐ 3 | |
| A place to meet with others and explore some new interests | ☐ 4 | |

**13. In your opinion, should the facilities of a community college (such as health service, library, athletic facilities) be available for general community use, or only for its students?**

| | | |
|---|---|---|
| General community | ☐ 1 | (29) |
| Students only | ☐ 2 | |

**14. What should be the chief source of funds needed for the building and running of community colleges?** Check ONE only:

| | | |
|---|---|---|
| Local taxation | ☐ 1 | (30) |
| Provincial government | ☐ 2 | |
| Student tuition fees | ☐ 3 | |

**15. Would you like to know more about your local community college?**

| | | |
|---|---|---|
| Yes | ☐ 1 | (31) |
| No | ☐ 2 | |

**16. Which of the following methods do you think would be most effective in giving you more information about the college?** Check NOT MORE THAN TWO:

| | | |
|---|---|---|
| Newspaper | ☐ 1 | (32) |
| Radio | ☐ 2 | (33) |
| T.V. | ☐ 3 | |
| Newsletters | ☐ 4 | |
| Other (please specify) | | |

17. **Do you think all college activities should be centred at one location, or at a number of smaller locations or campuses distributed around the community?**

One major centre ..... ☐ 1 (34)
Several smaller centres ..... ☐ 2

18. **Are you in favour of a community college campus in your neighbourhood?**

Yes ..... ☐ 1 (35)
No ..... ☐ 2

19. **Do you think more community colleges should be provided in British Columbia?**

Yes ..... ☐ 1 (36)
No ..... ☐ 2

20. **Would you be willing to be contacted for further comments?**

Yes ..... ☐ 1 (37)
No ..... ☐ 2

If yes, please fill in your name and telephone number

_____

_____

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# COLLEGE FACULTY QUESTIONNAIRE

## PURPOSE

This questionnaire is part of a research study of community colleges in British Columbia. Its essential purpose is to elicit the views of college faculty members in British Columbia on some of the most important and crucial questions which affect the colleges. The questions raised cover a broad range of issues but each one is regarded as being of singular importance in its own right.

Similar opinions have already been obtained from college students in previous questionnaires and it is felt that faculty viewpoints must also be considered to obtain a balanced picture.

The name of the responding faculty member is **NOT** requested. However, general questions regarding his program and discipline area are incorporated into the "basic data" sheet at the end of the questionnaire. Results will be tabulated on a group basis under the various categories used in the data sheet.

## ANTICIPATED USES OF THE RESULTS

1. The collated results of the questionnaire will be made available to faculty members in all colleges. The results will provide a basis for discussion of many of the issues raised in the questionnaire. Of particular interest in this respect will be the divergence of views held as indicated by the spread in response patterns.

2. The results will also be made available to legitimate bodies which have concerns for various aspects of post-secordary education. They will be an indication of the overall views of college faculty and provide a measure of the "degree of agreement" among faculty on various issues.

3. The results will assist students of higher education in examining the broad issue of community college education. Legitimate comparisons will be made with results of similar questionnaires used in other situations.

4. The results of the questionnaire will show the views held by faculty members at large rather than by individuals. This should provide guidance to those bodies who are genuinely interested in hearing faculty opinion on questions which are of concern to them.

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This Study is financed by a grant from the Donner Canadian Foundation and is being carried out by researchers from the University of B.C. and from B.C. Research (an independent, non-profit organization).



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PLEASE NOTE: Comments would be appreciated with respect to any specific questions on the questionnaire. A general space is provided for this purpose under "general comments" at the end of the questionnaire.

**1. In principle, which one of the following statements would you prefer? Check ONE only:** (10)

1. Colleges in B.C. should continue to operate under the Public Schools Act (11)
2. Colleges in B.C. should operate under a single Act which would include all post-secondary educational institutions 2
3. Colleges in B.C. should operate under an amended Universities Act 3
4. Colleges in B.C. should operate under a separate College Act 4
5. Colleges in B.C. should operate under a legislative enactment not described in the four previous alternatives 5
6. I have no opinion on this question 6

**2. In principle, which of the following statements would you prefer? Check ONE only:**

1. College curricula should be totally comprehensive and hence include academic transfer, technology, vocational and the various forms of Adult education (12)
2. College curricula should be solely of an academic transfer nature 2
3. College curricula should include only academic transfer and career technology type programs 3
4. College curricula should include only academic transfer, career technology and vocational type programs 4
5. College curricula should include only vocational and career technology type programs 5
6. I have no opinion on this question 6

**3. What type of structure at the Ministry of Education level in B.C. do you prefer? Check ONE only:**

1. Minister of Post-Secondary (or Advanced) Education (13)
2. A Deputy Minister for Post-Secondary education under the Minister of Education 2
3. An integrated Ministry of Education which would include public school and post-secondary education 3
4. An office of Post-Secondary education at the Superintendent level 4
5. I have no opinion on this question 5

**4. Which THREE of the problems facing Colleges in B.C. are at your view, as a faculty member, the most serious? Check THREE only:**

1. Financial support (14)
2. External governance (15-16)
3. Internal governance (17-18)
4. Relations with school boards 4
5. Relations with universities 5
6. Curriculum 6
7. Relations with business and industry 7
8. Lack of public acceptance 8
9. Relations with Academic Boards 9
10. Amalgamation with vocational Schools 10
11. Lack of College philosophy 11

**5. Which of the following objectives of post-secondary education do you, as a faculty member, consider the most important? Indicate your order of preference (1, 2, 3, 4):**

1. The learning of skills that lead to a job (19)
2. The learning of skills and habits used in critical and constructive thinking (20)
3. The attainment of satisfactory emotional and social adjustment (21)
4. The development of a broad general outlook on a variety of subjects (22)

**6. What THREE of the following features were most important in bringing you to this college? Check the THREE you consider most important:**

1. A sense of community involvement (23)
2. Many motivated, hard-working students (24)
3. Freedom to instruct and perform professional duties (25-26)
4. Salary 4
5. Quality of faculty 5
6. The emphasis on instruction 6
7. Availability of good facilities and equipment 7
8. Geographical location 8
9. Only position available 9
10. Other 10

**NOTE:** In questions 7 and 8 the term "general education" refers to broad educational experiences directed at the student's personal development rather than contributing directly to his technical or vocational competence.

**7. To what extent do you feel that "general education" should be included in the curriculum of vocational programs? Check ONE only:**

1. No general education requirement (27)
2. Up to 10% general education 2
3. Up to 25% general education 3
4. Up to 50% general education 4

**8. To what extent do you feel that "general education" should be included in the curriculum of career/technology programs? Check ONE only:**

1. No general education requirement (28)
2. Up to 10% general education 2
3. Up to 25% general education 3
4. Up to 50% general education 4

**9. In principle, which of the following alternatives comes closest to your own view about the proper role of students in formulating college policies, such as curriculum content and related issues? Check ONE only:**

1. Students should play no role in the formulation of educational policy (29)
2. Students should be consulted informally but should not participate in formal deliberations 2
3. Students should be allowed to sit on all committees to discuss the issues, but should possess no vote 3
4. Students should be allowed to vote on all committees but their votes should have less weight than those of faculty 4
5. Students should possess an equal vote with faculty on educational policy matters 5
6. Students and faculty representation should attempt to reach consensus 6

**10. Which of the following grading systems do you think would be best for your college? Check ONE only in each of the 3 columns:**

| | Academic Courses | Technical/ Career Courses | Trade Related Courses |
|---|---|---|---|
| 1. No grades at all, but course completed | 1 | 1 | 1 |
| 2. Pass and fail only | 2 | 2 | 2 |
| 3. Pass, fail and honours | 3 | 3 | 3 |
| 4. Letter grades (including pluses or minuses), without Withdrawal or Incomplete grades | 4 | 4 | 4 |
| 5. Letter grades including pluses or minuses with W and I grades | 5 | 5 | 5 |
| 6. Percentage or numerical grades | 6 | 6 | 6 |
| 7. Other | 7 | 7 | 7 |
| | (30) | (31) | (32) |

**11. Which of the following groups should be included on College Councils? Check ALL THOSE which apply:**

1. The community which the College serves (33)
2. Co-operating school boards (34)
3. College faculty (35)
4. College administration (36)
5. College students (37)
6. Parents of College students (38)
7. Provincial government appointees (39)
8. Local government appointees (40)
9. The "province-wide" community (41)
10. Specific groups in the community, e.g., unions, employer groups, etc. (42)
11. Women as a specific group (43)
12. Other groups not listed above (44)

**12. Where appropriate, do you feel that the representation listed in Question 11 should be appointed or elected by their constituencies. Check ONE only:**

1. Prefer election of representatives 1 (45)
2. Prefer appointment of representatives 2
3. Prefer a combination of appointed and elected representatives 3
4. Have no opinion on this question 4

**13. With which one of the following statements would you agree? Check ONE only:**

1. In general, the attainment of efficiency in administrative decision-making precludes discussion with the groups affected by the decision 1 (46)
2. In general, effective decision-making must include discussion with the groups concerned although wide support for the decision is not always necessary 2
3. As far as possible no decision should be made unless all groups affected by the decision have had adequate time to discuss the question and to agree on its implementation 3

**14. Are you in favour of a formal procedure to evaluate instructional effectiveness for purposes of promotion and/or rehiring? Check ONE only:**

1. Yes 1 (47)
2. No 2
3. Undecided 3

**15. If yes, who should be involved in this formal procedure? Check ALL THOSE who should be involved:**

1. Principal or president of the College (48)
2. Person at a Dean level (49)
3. Department or Divisional Chairman (50)
4. Colleagues (51)
5. Students (52)
6. Alumni (53)
7. Academic Board members (54)
8. External evaluators (55)
9. Other (56)

16. In general, what do you consider to be the chief attributes of most students who have completed a program or series of courses at your College? Check ALL THOSE which apply.

| | | |
|---|---|---|
| 1. | Adequate involvement with ideas | (57) |
| 2. | Ability to work independently | (58) |
| 3. | Concern with political, social or economic issues | (59) |
| 4. | Critical view of the values of society | (60) |
| 5. | General mastery of content of College courses | (61) |
| 6. | High or general intelligence | (62) |
| 7. | Social maturity | (63) |
| 8. | Prepared to adapt to technological change | (64) |
| 9. | No opinion | (65) |

17. In decisions concerning promotion and/or salary matters, what importance should be placed on the following categories, assuming that suitable measurement of each is possible? Check ONE only of high, medium, low for each of the 6 items.

| | | High | Medium | Low | |
|---|---|---|---|---|---|
| 1. | Teaching ability | | | | (66) |
| 2. | Research and/or scholarly or technical ability | | | | (67) |
| 3. | Community service | | | | (68) |
| 4. | Seniority | | | | (69) |
| 5. | Professional qualifications | | | | (70) |
| 6. | Service to institution (e.g., committee work, etc.) | | | | (71) |

1 2 3

X (10)

18. How satisfied are you with the following aspects of your present position? Check ONE only for each aspect.

| | | Very High Satisfaction | High Satisfaction | Medium Satisfaction | Low Satisfaction | Very Low Satisfaction | |
|---|---|---|---|---|---|---|---|
| 1. | Security (tenure) | | | | | | (11) |
| 2. | Salary | | | | | | (12) |
| 3. | Fringe Benefits | | | | | | (13) |
| 4. | Number of instructional hours required | | | | | | (14) |
| 5. | Schedule of hours at which I am required to teach | | | | | | (15) |
| 6. | Vacation time | | | | | | (16) |
| 7. | Relations with College Council | | | | | | (17) |
| 8. | Professional freedom | | | | | | (18) |
| 9. | Research support and facilities | | | | | | (19) |
| 10. | Institutional prestige | | | | | | (20) |
| 11. | Opportunity to participate in College governance | | | | | | (21) |
| 12. | Relations with administration | | | | | | (22) |
| 13. | Relations with Colleagues | | | | | | (23) |

1 2 3 4 5

19. How do you feel that most students of your college would look upon the general instructional ability of College faculty as compared with high school teachers? Check ONE only.

| | | |
|---|---|---|
| 1. | Much better | (24) |
| 2. | Above average | |
| 3. | Average | |
| 4. | Below average | |
| 5. | Much poorer | |

20. In the main, which one of the following organizations is best suited to represent college faculty? Assume that the organization selected will represent the broad interests of faculty. Check ONE only.

| | | |
|---|---|---|
| 1. | Canadian Association of University Teachers | (25) |
| 2. | B.C. Teachers Federation | |
| 3. | Society of vocational instructors of B.C. | |
| 4. | B.C. College Faculties Federation | |
| 5. | Separate organization for each College | |
| 6. | Canadian Union of Public Employees | |
| 7. | Other | |
| 8. | No such organizations are necessary | |

21. Which type of term or year structure do you feel is most appropriate for B.C. colleges? Check ONE only.

| | | |
|---|---|---|
| 1. | Eight month academic year with two month summer session | (26) |
| 2. | Ten month academic year, no summer session | |
| 3. | Three semesters of four months each | |
| 4. | Two semesters of four months each and a short summer session | |
| 5. | Two semesters of five months each | |
| 6. | Four quarters of three months each | |
| 7. | Other type of arrangement (specify under comments on back page) | |

22. In principle, which one of the following designs for the community college do you prefer? Check ONE only.

| | | |
|---|---|---|
| 1. | A single comprehensive centre | (27) |
| 2. | A comprehensive major centre with small satellite branches | |
| 3. | A major comprehensive centre with a number of minor centres offering a number of appropriate courses or program offerings | |
| 4. | Three complete centres, one each for academic, technical, career and vocational programs | |
| 5. | An administrative and library centre only, with courses taught in available appropriate facilities throughout the district | |
| 6. | An administrative and library centre, with courses offered mainly through T.V., cable, radio or directed study | |
| 7. | A design other than those listed above | |

Questions 23 to 27 require only a **Yes** or **No** response.

| | | Yes | No | |
|---|---|---|---|---|
| 23. | Are you in favour of colleges developing into degree-granting institutions? | | | (28) |
| 24. | Are you in favour of the establishment of ranks (e.g., assistant professor, associate professor, etc.) in college faculties? | | | (29) |
| 25. | Are you in favour of a requirement of provincial certification of college teachers? | | | (30) |
| 26. | Are you in favour of an internship program of approximately one semester for prospective college teachers? | | | (31) |
| 27. | Do you agree that scholastic entrance requirements for B.C. colleges are generally too low? | | | (32) |

1 2

Questions 28 and 29 require a choice of alternatives.

28. With which one of the following alternatives would you agree? Check ONE only.

| | | |
|---|---|---|
| | A predominantly commuter-type college | (33) |
| | OR | |
| | Construction of college residences where the size of college district warrants such construction | |

29. Retention of "out of district" fees for students not residing in a college district

| | | |
|---|---|---|
| | | (34) |
| | OR | |
| | The elimination of "out of district" fees for all students | |

## BASIC DATA

In each question check ONE only.

1. **Sex**

| | | |
|---|---|---|
| | Male | (41) |
| | Female | |

2. **Age group**

| | | |
|---|---|---|
| | Under 20 | (42) |
| | 20 - 24 | |
| | 25 - 34 | |
| | 35 - 44 | |
| | Over 44 | |

3. **Appointment status**

| | | |
|---|---|---|
| | Full time | (43) |
| | Part time | |

4. **Present position**

| | | |
|---|---|---|
| | Instructor, academic | (44-45) |
| | Instructor, career-technical | |
| | Instructor, vocational | |
| | Instructor, academic-technical-vocational | |
| | Divisional or department head | |
| | Administration | |
| | Administrative-teaching | |
| | Counsellor | |
| | Library/Resource Centre staff | |
| | Librarian | |
| | Laboratory, shop assistant, technician | |
| | Other | |

5. **PRIMARY instructional area**

| | | |
|---|---|---|
| Vocational | | (40) |
| Technical/career | 2 | |
| Academic | | |
| Social Sciences | 3 | |
| Humanities | 4 | |
| Sciences | 5 | |
| Mathematics | 6 | |
| Modern Languages | 7 | |

6. **Qualifications (highest earned)**

| | | |
|---|---|---|
| Trade certificate or diploma | 1 | (47) |
| Bachelor's degree | 2 | |
| Master's degree | 3 | |
| Doctoral degree | 4 | |
| Teaching certificate | 5 | |
| Other qualification | 6 | |

7. **Where was the last position you held prior to coming on to the college faculty?**

| | | |
|---|---|---|
| Teaching (or related duties) - university | 1 | (48-49) |
| Teaching (or related duties) - vocational school | 2 | |
| Teaching (or related duties) - technical institute | 3 | |
| Teaching (or related duties) - college | 4 | |
| Teaching (or related duties) - school system | 5 | |
| Librarian - Public, College, University, School | 6 | |
| Graduate student - university | 7 | |
| Business or industry | 8 | |
| Government employee | 9 | |
| Other | 10 | |

8. **Formal student contact: average hours/week (class, lab, shop, library)**

| | | |
|---|---|---|
| Less than 6 | 1 | (50) |
| 6 - 10 | 2 | |
| 11 - 14 | 3 | |
| 15 - 19 | 4 | |
| 20 or more | 5 | |

9. **Informal student contact: average hours/week (office, recreational, cultural)**

| | | |
|---|---|---|
| Less than 6 | 1 | (51) |
| 6 - 10 | 2 | |
| 11 - 14 | 3 | |
| 15 - 19 | 4 | |
| 20 or more | 5 | |

10. **Average hours/week spent in preparation for specific classes, labs, shops**

| | | |
|---|---|---|
| Less than 6 | 1 | (52) |
| 6 - 10 | 2 | |
| 11 - 14 | 3 | |
| 15 - 19 | 4 | |
| 20 or more | 5 | |

11. **Average hours/week spent in professional activities other than teaching (committee work, research, study, preparation for classes, professional discussion with colleagues, preparation for committee work, attendance at professional meetings)**

| | | |
|---|---|---|
| Less than 6 | 1 | (53) |
| 6 - 10 | 2 | |
| 11 - 14 | 3 | |
| 15 - 19 | 4 | |
| 20 or more | 5 | |

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# COMMUNITY COLLEGE ALUMNI SURVEY

Please do not write your name anywhere on this questionnaire. No individual will be identified in the results. It is necessary, however, to place a code number on the questionnaire. This has been done at the bottom of this page.

QUESTIONNAIRE DIRECTIONS

Place an "X" in the bracket ( ) in front of the appropriate answer. You should mark only one response per question.

Please ignore the numbers in front of the bracket. These numbers are for computer coding only.

1. What is your present activity?

| | | |
|---|---|---|
| 20/1 | ( ) | A. Employed, full-time |
| 20/2 | ( ) | B. Employed, part-time |
| 20/3 | ( ) | C. Unemployed, seeking work |
| 20/4 | ( ) | D. Unemployed, not seeking work |
| 20/5 | ( ) | E. Student |
| 20/6 | ( ) | F. Travel |
| 20/7 | ( ) | G. Other |

IF YOU ARE PRESENTLY EMPLOYED, THAT IS, CHECKED EITHER RESPONSE A OR B ABOVE, PLEASE ANSWER ALL THE REMAINING QUESTIONS

IF YOU ARE NOT PRESENTLY EMPLOYED, PLEASE GO TO QUESTION 16

2. Name of your present employer.

3. Type of business or service.

4. What is your actual job or position? 21/

5. In applying for a job with your present employer:

a. were you required to be a college graduate?

22/1 ( ) A. Yes
22/2 ( ) B. No
22/3 ( ) C. Uncertain

b. did your employer ask for proof of your college education?

23/1 ( ) A. Yes
23/2 ( ) B. No

c. were you asked about your college achievement or "grades?"

24/1 ( ) A Yes
24/2 ( ) B. No

d. were you asked to provide college references?

25/1 ( ) A. Yes
25/2 ( ) B. No

6. How long from the time you left college did it take you to find this job?

26/1 ( ) A. Had job before leaving college
26/2 ( ) B. 0 to 1 month
26/3 ( ) C. 1 to 2 months
26/4 ( ) D. 2 to 3 months
26/5 ( ) E. 3 to 4 months
26/6 ( ) F. More than 4 months

7. Does the work you are now doing relate directly to study done at V.C.C.?

27/1 ( ) A. No
27/2 ( ) B. A little
27/3 ( ) C. Somewhat
27/4 ( ) D. Very much

8. Is this job satisfactory to you?

28/1 ( ) A. Yes
28/2 ( ) B. Partly
28/3 ( ) C. No
28/4 ( ) D. Uncertain

9. Do you plan to make this type of work your life's career?

29/1 ( ) A. Yes
29/2 ( ) B. No
29/3 ( ) C. Uncertain

10. What was your starting salary per month?

30/1 ( ) A. Less than $400
30/2 ( ) B. $400 - $499
30/3 ( ) C. $500 - $599
30/4 ( ) D. $600 - $699
30/5 ( ) E. $700 - $899
30/6 ( ) F. $900 and over

11. To what degree do you feel you can compete on the job with your fellow employee?

31/1 ( ) A. At a superior level
31/2 ( ) B. On an equal basis
31/3 ( ) C. At a disadvantage

12. Are you presently taking any courses or training related to your work?

32/1 ( ) A. Yes
Where?_____
32/2 ( ) B. No

13. In your particular college program, do you consider that adequate facilities were provided?

33/1 ( ) A. Yes
33/2 ( ) B. Uncertain
33/3 ( ) C. No
Indicate_____
_____
_____

14. In your view, after having obtained a job, what type of courses would help you most in job advancement?

34/1 ( ) A. General courses such as English or social sciences
Indicate _____

34/2 ( ) B. Practical courses
Indicate _____

34/3 ( ) C. Uncertain

15. After some time of actual on the job experiences, would you consider your course or program material at the college to meet the requirements of your employer?

35/1 ( ) A. Yes
35/2 ( ) B. Partly
35/3 ( ) C. No
35/4 ( ) D. Uncertain

16. In general did courses taken at the college fulfill your expectations?

36/1 ( ) A. Yes
36/2 ( ) B. Partly
36/3 ( ) C. No
36/4 ( ) D. Uncertain

17. Do you intend to enroll at an educational or training institution at some later date?

37/1 ( ) A. No
37/2 ( ) B. Yes, part-time
37/3 ( ) C. Yes, full-time
Where? _____
When? _____

18. If you had college to do over again would you take a different pattern of courses or programs at V.C.C.?

38/1 ( ) A. Yes
Why? _____

38/2 ( ) B. No
Why? _____

19. Would you recommend taking the same course or program that you did to a friend?

39/1 ( ) A. Yes, same program
Why? _____

39/2 ( ) B. No, a different program
39/3 ( ) C. No program at all
Why? _____

20. Did the college assist you to organize your own skills and learning habits so you can continue with your own learning?

40/1 ( ) A. Yes
40/2 ( ) B. No
40/3 ( ) C. Uncertain

21. Has your understanding or awareness of the nature of higher education changed either while you were in college or after you left?

41/1 ( ) A. Yes
41/2 ( ) B. No

22. If your answer to the previous question was "Yes" which of the following would you consider to be the primary reason?

42/1 ( ) A. Counsellor's help
42/2 ( ) B. Instructor's help
42/3 ( ) C. Your own self analysis
42/4 ( ) D. Failure in college work
42/5 ( ) E. Work experience
42/6 ( ) F. Social experiences
42/7 ( ) G. Other

23. If you did not continue your education full-time at a university, indicate the primary reason for not continuing.

43/1 ( ) A. Could not afford to continue
43/2 ( ) B. Unable to transfer to university due to low college grade point average
43/3 ( ) C. Did not feel higher education was meeting your personal needs
43/4 ( ) D. Felt you had an adequate education for work in a particular skill, trade, or area
43/5 ( ) E. Felt higher education had nothing to offer you
43/6 ( ) F. Secured a full-time position which you preferred to higher education
43/7 ( ) G. Other

24. In which way could your experience at V.C.C. have been more helpful to you?

44/1 ( ) A. V.C.C. experience was as helpful as it could be
44/2 ( ) B. A closer relationship could exist between student and instructor
44/3 ( ) C. A wider range of potential fields of study should be offered
44/4 ( ) D. More supervision and guidance in classroom could be offered
44/5 ( ) E. More helpful guidance in choice of programs and course explanation
44/6 ( ) F. More time allowed for student activities

# THE VANCOUVER BOARD OF TRADE

## A SURVEY OF THE BUSINESS COMMUNITY'S VIEWS OF COMMUNITY COLLEGE GRADUATES

**ABOUT THIS QUESTIONNAIRE . . .**

This questionnaire is part of a major study of community colleges in B.C. which is now nearing completion. It is being carried out jointly by researchers from the **U.B.C. Faculty of Education** and from **B.C. Research**, an independent, non-profit research organization. The study is supported principally by a grant from the Donner Canadian Foundation.

The purpose of the study is to find out how well the college system in B.C. meets the needs and expectations of students and of the community at large which, of course, includes the business community.

The facts being gathered will provide a great deal of information which until now has not been available to the people who are responsible for planning courses and facilities in the college system. Your cooperation in completing this questionnaire would be greatly appreciated. Please note that you are NOT asked to identify your firm.

We would be most grateful if you would ensure that this questionnaire is completed by your organization and returned to B.C. Research in the enclosed envelope before the end of September, 1974.

Thank you for your assistance. Please note that space is provided at the end of the questionnaire for any comments you may have.

Please place an "X" or "✓" in the box beside your answer.
IGNORE ALL NUMBERS. They are for coding purposes only.

**ABOUT YOUR COMPANY** Please note that these questions pertain to the B.C. OPERATIONS OF YOUR COMPANY ONLY.

**1. Which one of the following categories BEST describes your business operations? Check ONE only.** (9-9)

- Agriculture ☐ 1
- Forestry ☐ 2
- Fishing ☐ 3
- Mining ☐ 4
- Manufacturing
  - Food and beverage ☐ 5
  - Rubber and plastic products ☐ 6
  - Textiles and clothing ☐ 7
  - Wood and wood products, furniture, etc. ☐ 8
  - Metal and fabrication, machinery, transportation equipment ☐ 9
  - Electrical products ☐ 10
  - Chemical/petrochemical products ☐ 11
  - Miscellaneous manufacturing ☐ 12
- Construction ☐ 13
- Transportation, communication, and other utilities ☐ 14
- Trade
  - Wholesale trade ☐ 15
  - Retail trade ☐ 16
- Finance, insurance, real estate ☐ 17
- Public administration and defense ☐ 18
- Community, business, and personal service industries
  - General social services, education, welfare, etc. ☐ 19
  - Services to business management ☐ 20
  - Personal services ☐ 21
  - Accommodation and food services ☐ 22
  - Miscellaneous services ☐ 23
- Industry unspecified or undefined ☐ 24

**2. In your organization, what is the approximate number of:**

- full-time employees (12-15)
- part-time employees (16-19)
- seasonal employees (20-23)

**3. Approximately how many new full-time employees did your organization hire in 1973 (to cover both expansion and attrition)?** (24-29)

**4. Approximately what was the dollar volume of your business in 1973?** (32-40)

**5. Approximately how many employees left their jobs in 1973 (for any reason)?** (43-46)

**6. Approximately how many people are employed in the following areas?**

- Management & supervisory functions (47-50)
- Professional & technical (52-55)
- Trades & labour (57-60)
- Sales (62-65)
- Clerical (67-70)

**7. Approximately what percentage of personnel have attained the following levels of education (HIGHEST level)?**

- Elementary school (72-75)
- Secondary school (77-80)
- Vocational school (e.g. Vancouver Vocational Institute, Burnaby Vocational, Vocational Division of a Community College, ) ( 8-11)
- Technical school (e.g. B.C. Institute of Technology, ) (13-16)
- Community college (e.g. Vancouver City College, Capilano College, Douglas College, ) (18-21)
- University (23-26)

8. Of your full-time employees last year, what was the approximate percent —

With experience in a related job? (29-30)

New to permanent employment (i.e. straight from school)? (32-33)

9. Do you have problems in recruiting qualified personnel? Check ONE only.

Generally, yes ☐ 1 (35)
Generally, no ☐ 2
Only for specialized jobs, such as ☐ 3

10. If recruiting difficulties are experienced, to which of the following causes are they most often attributable? Check ONE only.

Not enough applicants ☐ 1 (37)
Plenty of applicants, but inadequate formal training ☐ 2
Plenty of applicants, adequate formal training, but insufficient practical experience ☐ 3
Other (please explain) ☐ 4

11. If formal training was inadequate, in what respect was it inadequate?

(38)

WITH REFERENCE TO COLLEGES:

12. Which of the following objectives of post-secondary education do you, as an employer, consider the most important? Indicate your order of preference (1, 2, 3, 4) for each alternative.

To learn the specific skills required for a trade or profession (41)
To learn to think constructively and critically (42)
To get on well with other people (43)
To develop a broad general outlook on life (44)

13. Are you presently employing people trained or educated in a community college? Check ONE only.

Yes ☐ 1 (46)
No ☐ 2
Uncertain ☐ 3

14. Approximately what percentage of all the positions in your organization require SOME community college-level training, but not necessarily a certificate or diploma? (51-52)

15. What percentage of positions require an employee to have a community college diploma or certificate? (54-55)

16. How would you evaluate community college training for positions where you require such training? Check ONE only.

Good ☐ 1 (57)
Fair ☐ 2
Poor ☐ 3
Uncertain ☐ 4

17. What (IF ANY) do you consider to be the greatest weaknesses in the competence of community college graduates? Please rank in order (1, 2, 3 . . .) the alternatives which you feel are applicable.

Inadequate knowledge of specific skills (59)
Inadequate general education (60)
Inability to communicate orally and in writing (61)
Inability to think constructively and critically (62)
Poor attitude toward work (63)
Problems in getting along with other people (64)
Other (please specify) (65)

18. In general, does formal training result in better job performance? Check ONE only.

Yes ☐ 1 (67)
No ☐ 2
Uncertain ☐ 3

19. Would you hire a community college graduate in preference to a secondary school graduate, other circumstances being equal? Check ONE only.

Generally, yes ☐ 1 (69)
Generally, no ☐ 2
Uncertain (please explain) ☐ 3

20. Would the community college graduate receive a higher starting salary than the secondary school graduate? Check ONE only.

Generally, yes ☐ 1 (69)
Generally, no ☐ 2
Depends entirely upon performance ☐ 3

21. Would the community college graduate have better job prospects than an employee without formal training? Check ONE only.

Generally, yes ☐ 1 (70)
Generally, no ☐ 2
Depends entirely upon performance ☐ 3

22. In what ways would your firm be prepared to assist in planning and implementing career courses? Check ALL those applicable.

Advise on course content ☐ (72)
Provide on-the-job experience ☐ (73)
Make available some employees to give lectures and demonstrations to students ☐ (74)
Hire students on a part-time basis throughout the year ☐ (75)
Hire students full-time during vacation ☐ (76)
Other (please explain) ☐ (77)

ADDITIONAL COMMENTS:

Thank you for your co-operation in completing this questionnaire. Please return it by Monday, September 30, 1974 to B.C. Research, 3650 Westbrook Crescent, Vancouver, B.C. V6S 2L2

**Appendix B**

# EXPLANATION OF TERMS USED

*Academic transfer program:* a program of study comprising up to two full years of academic credit, which is equivalent to programs available at provincial universities. Students successfully completing academic transfer programs at colleges are granted credit upon transfer to a university.

*Articulation study:* a study concerned with the academic performance of students moving from one level of post-secondary education to another (e.g. college to university, college to technical institute). The term is commonly used in educational research and derives from the meaning of the word articulation as "the action of jointing," in this context referring to the connection of two or more levels of education.

*Career/technical program:* a program of studies up to two years in length and leading to the award of either a certificate or diploma in a variety of career fields.

*College age student:* a student under 25 years of age.

*College region:* an area composed of a combination of school districts which support a community college.

*Community college:* a two-year post-secondary educational institution providing, on a full or part-time basis, a variety of courses in academic, career, technical, vocational, and university transfer programs.

*Comprehensive curriculum:* college programs available in a wide variety of areas within the same institution (e.g., academic, career/technical and vocational programs).

*Democratization:* as applied to post-secondary education, refers to the process by which such education is made available to a broader socio-economic cross-section of the population than was the case in the past.

*General education:* curricula designed to serve a student's general interest and cultural development rather than his technical or vocational competence.

*Mature student:* a student aged 25 years or more.

*Multi-campus colleges:* faculties decentralized in a number of locations within a college district.

*Socio-economic status:* a classification of students based on father's occupation; high - managerial, professional; middle - clerical, sales, service, skilled, technical, farmer (own farm); low - primary industry, semi-skilled, transport, communications, unskilled.

*Technical institute:* an institution for advanced technical education, offering a broad range of two-year programs.

*The Vancouver Board of Trade:* a voluntary association of firms and businessmen which seeks to further the interests of the business community in Vancouver.

*Vocational program:* a program of study ranging in length from two weeks to two years which provides training in various industrial and business skills.

*Vocational school:* an institution under the direct control of the Department of Education, offering courses and programs leading to immediate employment.

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